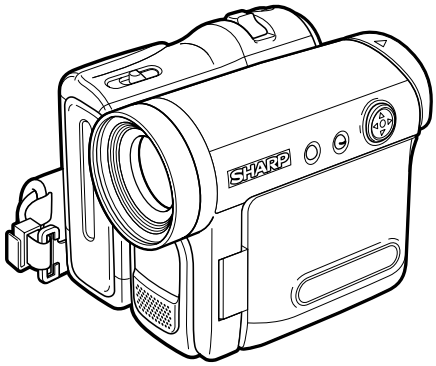
SHARP SERVICE MANUAL

S64V5VL-Z100S

LIQUID CRYSTAL DISPLAY CAMCORDER PAL



MODELS

VL-Z100S-S
VL-Z100H-S
VL-Z100E-S
VL-Z300S-S
VL-Z300H-S
VL-Z300E-S

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified be used.

CONTENTS

Page

1. SPECIFICATIONS 2
2. PART NAMES 3
3. DISASSEMBLY OF THE SET 4
4. MECHANISM ADJUSTMENT JIGS AND PARTS 8
5. INSPECTION AND MAINTENANCE ITEMS AND INTERVALS 9
6. ADJUSTING AND CHECKING OF MECHANISM 10
7. ADJUSTMENT OF RUNNING SYSTEM 13
8. ASSEMBLING OF MECHANISM SECTION AND PART REPLACEMENT (DISASSEMBLING AND ASSEMBLING) 15
9. METHOD OF ADJUSTING THE ELECTRIC CIRCUIT 25
10. USEFUL TIPS 44
11. SIGNAL FLOW DIAGRAMS 45
12. BLOCK DIAGRAMS 48
13. SCHEMATIC DIAGRAMS 56
14. SEMICONDUCTOR LEAD IDENTIFICATION 126
15. PRINTED WIRING BOARD ASSEMBLIES 128
16. REPLACEMENT PARTS LIST 143
17. PACKING OF THE SET 164

SHARP CORPORATION

1. SPECIFICATIONS

Signal System:	PAL standard
Recording System:	2 rotary heads, helical scanning system
Cassette:	Digital VCR Mini DV video cassette
Recording/Playback Time:	90 minutes (DVM60, LP mode)
Tape Speed:	SP mode: 18.831mm/second LP mode: 12.568 mm/second
Pickup Device:	$^1/_6$" (4.2 mm, effective size: 3.0 mm) CCD image sensor (with approx. 800,000 pixels including optical black, effective pixels: 414,000 pixels)
Lens:	10 × optical zoom lens (F1.8, f=3.8-38.0 mm)
Lens Filter Diameter:	30 mm
Monitor:	2.5" (6.4 cm) CGSilicon
Viewfinder:	0.16" LCD panel, slide type
Built-in Microphone:	Electret monaural microphone
Color Temperature Compensation:	Auto white balance with white balance lock, outdoor or indoor
Minimum Illumination:	2 lux* (with gain-up, F1.8)
DV terminal:	4 pin connector (i.LINK)
Power Requirement:	DC 7.4 V
Power Consumption:	3.4 W (during camera recording in Tape Camera mode using the viewfinder in Full Auto mode with the DIS function on) 4.0 W (during camera recording in Tape Camera mode using the LCD monitorin in Full Auto mode with the DIS function and backlight in normal mode)
Operating Temperature:	0°C to +40°C
Operating Humidity:	30% to 80%
Storage Temperature:	–20°C to +60°C
Dimensions (approx.):	82.9 mm (W) × 82.2mm (H) × 100.8 mm (D)
Weight (approx.):	470 g (without battery pack, lithium battery, video cassette and lens cap)

AC Adapter (UADP-A053WJZZ)

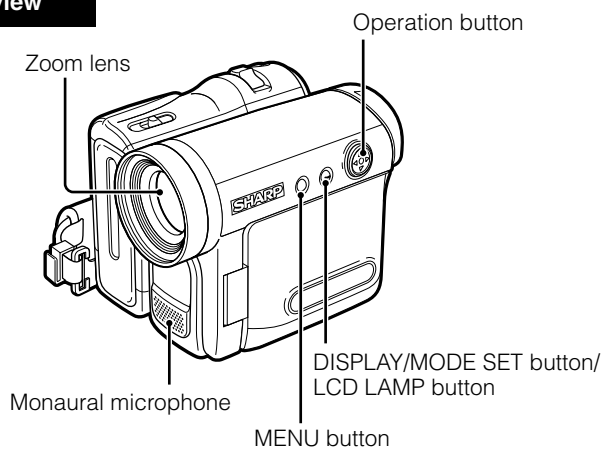
Power Requirement:	AC 110-240 V, 50/60 Hz
DC Output:	10 V
Dimensions (approx.):	49.0 mm (W) × 27.5 mm (H) × 79.0 mm (D)

Specifications are subject to change without notice.

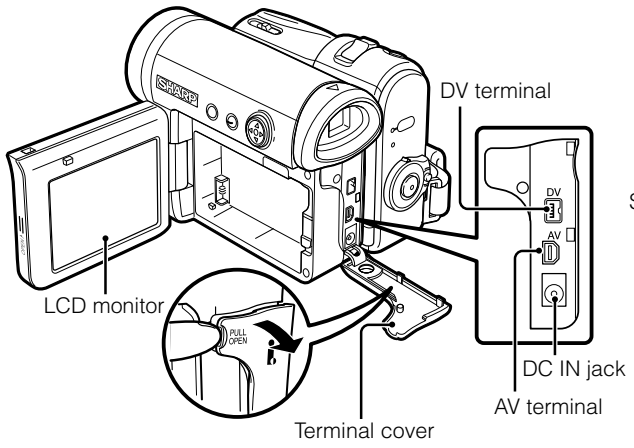
*Minimum illumination: Since there is no widely accepted testing procedure for determining minimum illumination capability, lux ratings are comparable only between models from the same manufacturer.

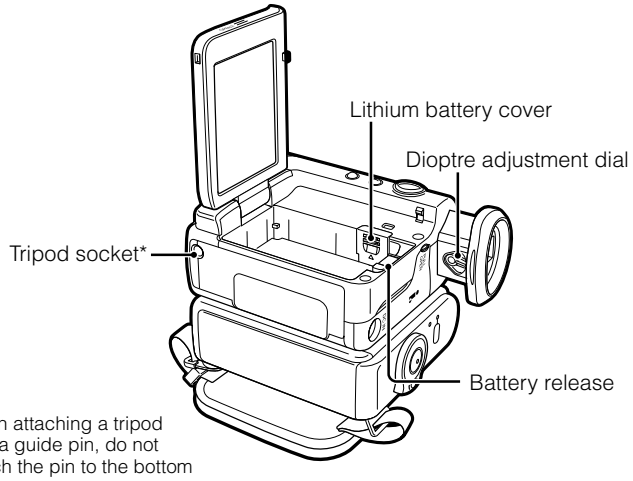
2. PART NAMES

Front view



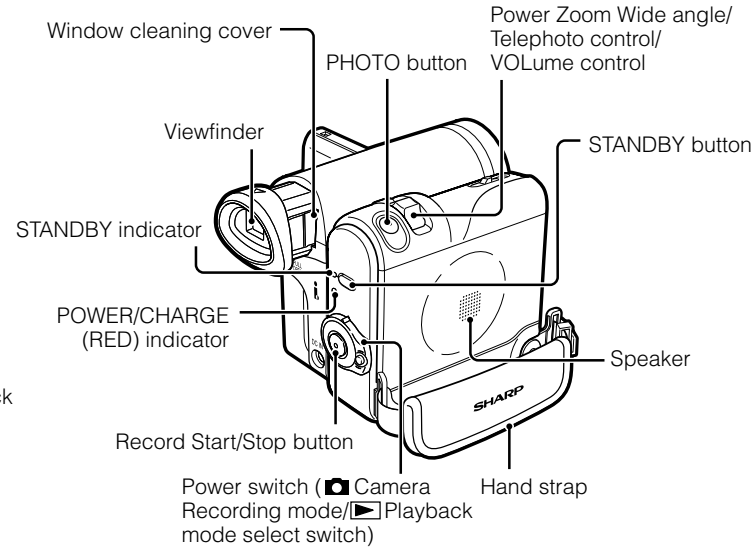
Left view

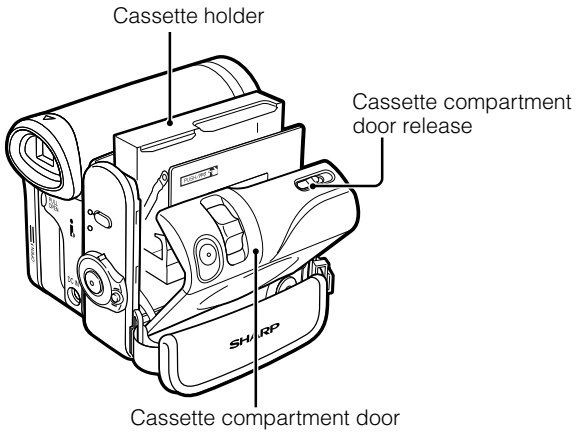




* When attaching a tripod with a guide pin, do not attach the pin to the bottom of the camcorder.

Right view



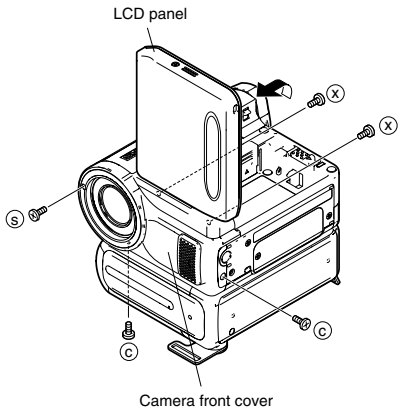


3. DISASSEMBLY OF THE SET

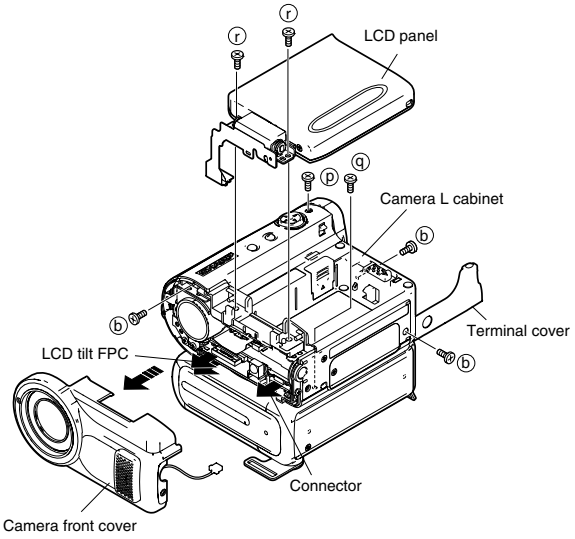
3-1. Procedure for disassembling the cabinet

Note: Before removing the cabinet, turn OFF the power and make sure that the battery is not connected.

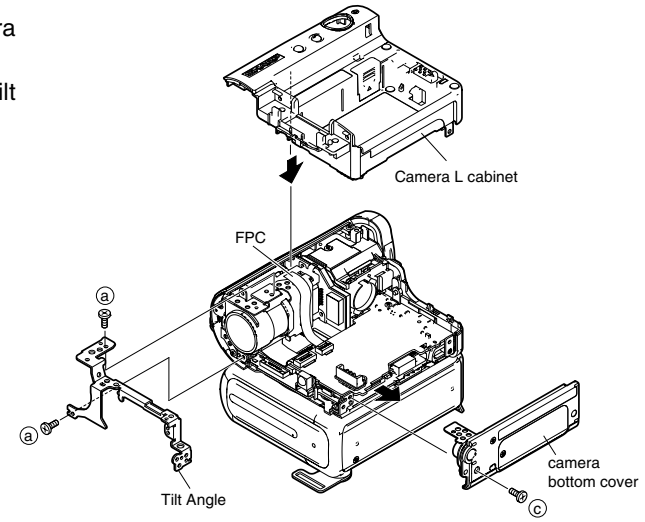
1.
- Remove the screw ((s) XiPSF14P06000).
- Open the LCD panel 90 degrees and remove the two screws ((x) LX-HZ0050TAFN).
- Remove the two screws ((c) XiPSN17P04000) and remove the camera front cover by pulling it frontward.



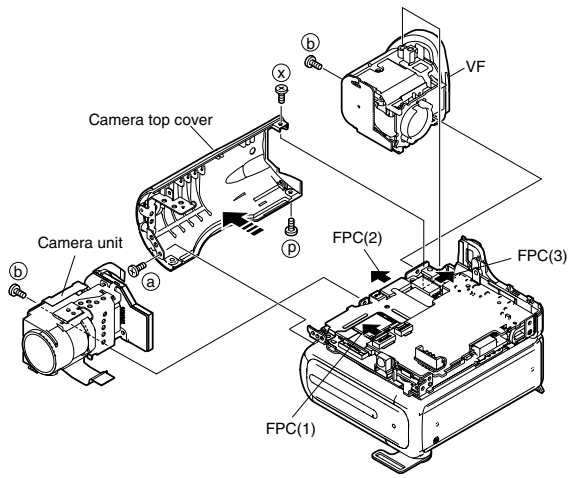
2.
- Disconnect the connector of the camera front cover.
- Disconnect the two LCD tilt FPCs of the LCD panel.
- Remove the two screws ((r) XiPSN20P08000) and remove the LCD panel.
- Remove the screw ((p) LX-HZ0063TAFN) and screw ((q) XiPSN17P06000) that hold the camera L cabinet, open the terminal cover and remove the three screws ((b) XiPSN17P03000).



3.
- Remove the FPC and remove the camera L cabinet.
- Remove the screw ((c) XiPSN17P04000) and remove the camera bottom cover.
- Remove the two screws ((a) XiPSN17P02000) and remove the tilt angle.

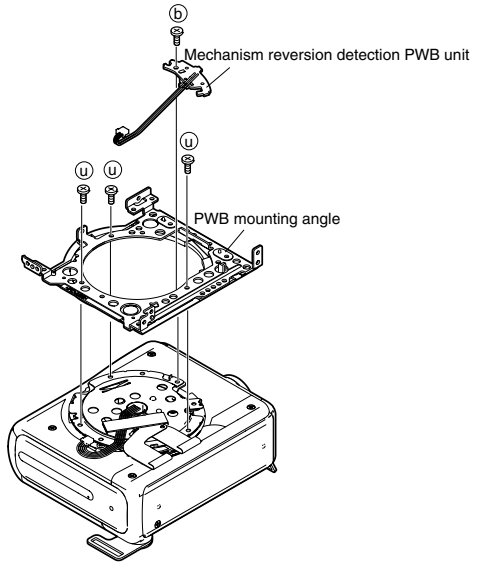


4.



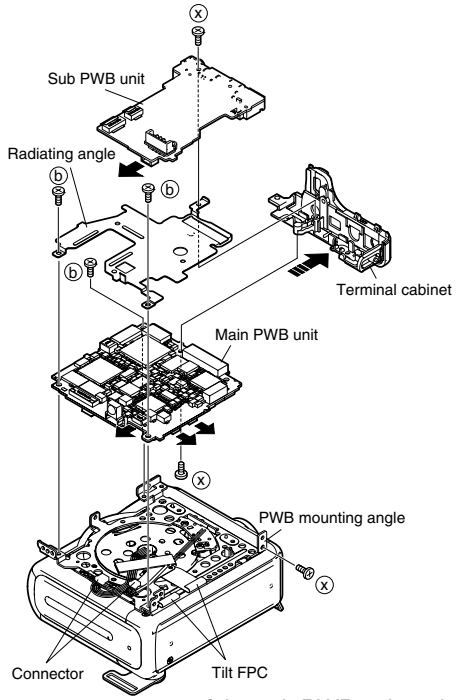
· Remove the screw ((x) LX-HZ0050TAFN), screw ((p) LX-HZ0063TAFN) and screw ((a) XiPSN17P02000), remove the camera top cover.
· Remove the screw ((b) XiPSN17P03000) from the camera unit, disconnect the FPC (1), FPC (2) and remove the camera unit.
· Remove the screw ((b) XiPSN17P03000), disconnect the FPC (3) and remove the VF.

6.



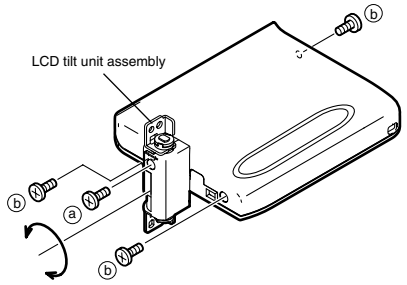
· Remove the screw ((b) XiPSN17P03000) and remove the Mechanism reversion detection PWB unit.
· Remove the three screws ((u) LX-BZ0221TAFC) and remove the PWB mounting angle.

5.



· Disconnect the two connectors of the sub PWB unit and main PWB unit.
· Remove the two screws ((b) XiPSN17P03000) from the radiating angle, remove the screw ((b) XiPSN17P03000) from the PWB unit and remove each unit.
· Disconnect the two FFCs of the main PWB unit.
· Remove the two screws ((x) LX-HZ0050TAFN), remove the screw ((x) LX-HZ0050TAFN) form the PWB mounting angle and remove the terminal cabinet.

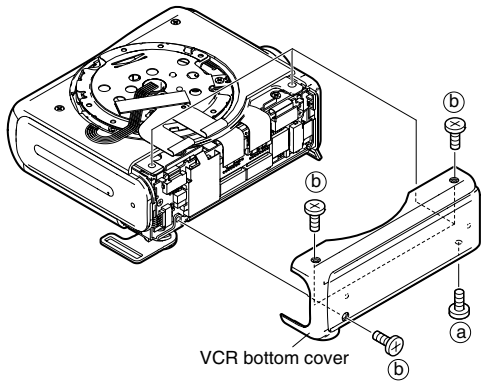
7.



· Turn the LCD tilt unit assembly 90 degrees.
· Remove the three screws ((b) XiPSN17P03000).
· Remove the screw ((a) XiPSN17P02000).

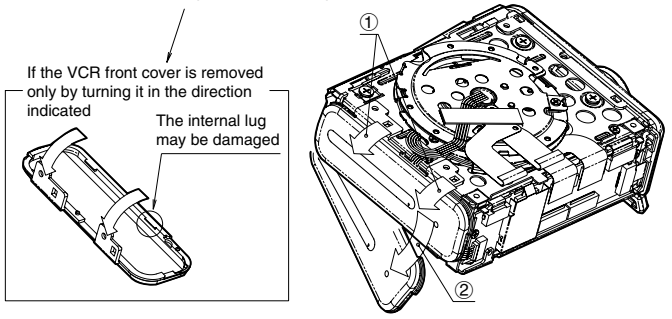
3-2. Procedure for disassembling the cabinet

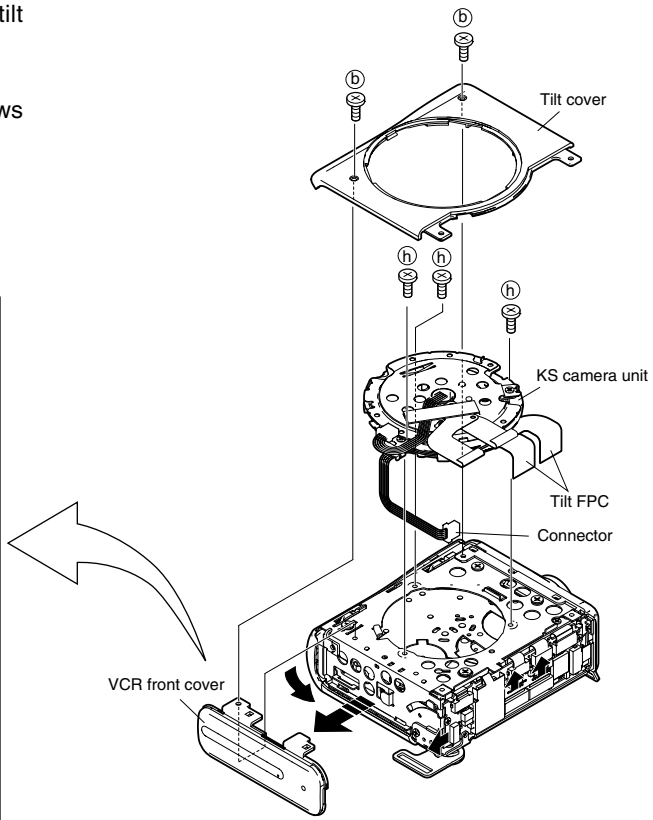
1.
· Remove the three screws ((b) XiPSN17P03000) remove the screw ((a) XiPSN17P02000) and remove the VCR bottom cover.



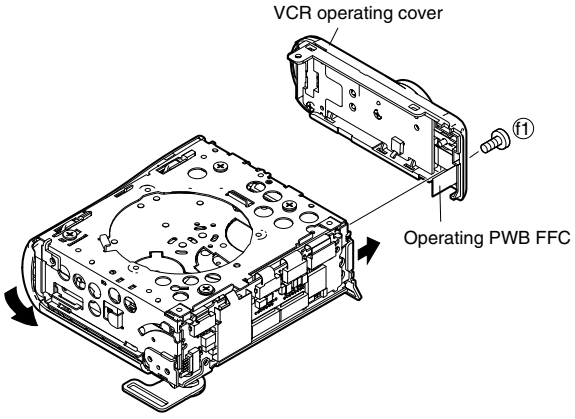
2.
· Remove the two screws ((b) XiPSN17P03000) and remove the tilt cover.
· Remove the VCR front cover with the cassette cover opened.
· Disconnect the connector and two tilt FPCs, remove the three screws ((h) LX-BZ0220TAFC) and remove the KS camera tilt.

How to remove the VCR front cover
1. Remove the two couplings and turn the VCR front cover about 20 degrees in the direction indicated by (1).
2. Turn the VCR front while sliding it in the direction indicated by (2) to disengage the internal lug.
* If the VCR front cover is removed by turning it forcedly in the direction indicated by (1), the internal lug may be damaged.



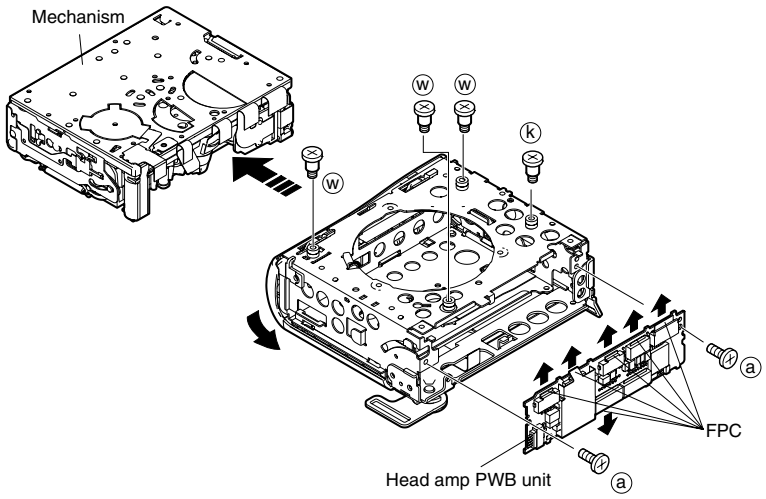


3.
· Remove the screw ((f1) XiPSF17P04000) with the cassette lid opened, disconnect the operation PWB FFC and remove the VCR operating cover.



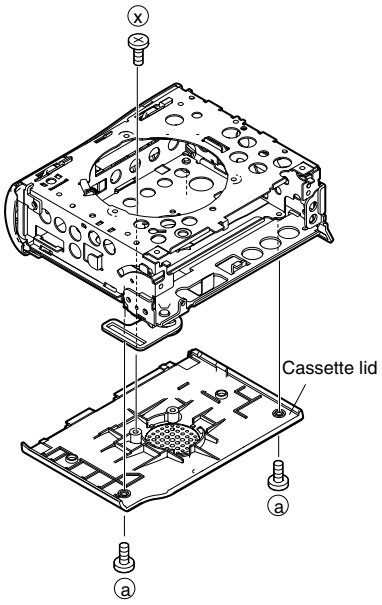
4.

· Disconnect the six FPCs of the head amp circuit board unit.
· Remove the two screws ((a) XiPSN17P02000) and remove the head amp PWB unit.
· Remove the three screws ((w) LX-BZA022WJFN) and remove the screw ((k) LX-BZA023WJFD).
· Remove the mechanism with the cassette lid opened.



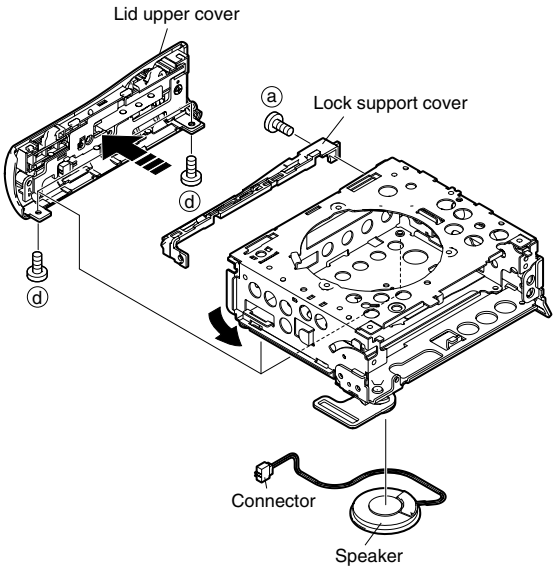
5.

· Remove the screw ((x) LX-HZ0050TAFN).
· Remove the two screws ((a) XiPSN17P02000) and remove the cassette lid.



6.

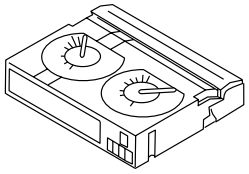
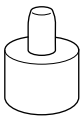
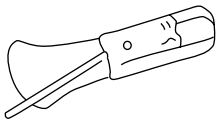
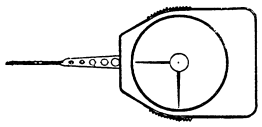
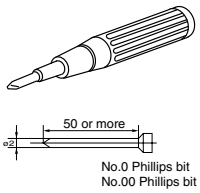
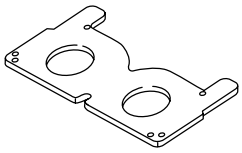
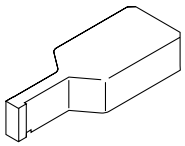
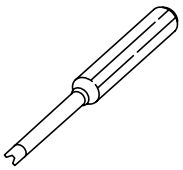
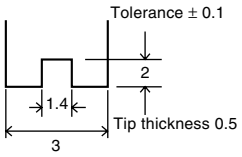
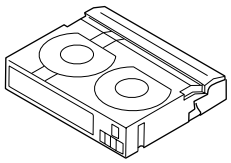
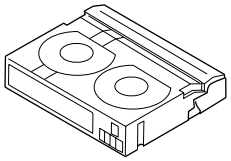
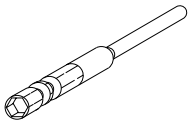
· Remove the two screws ((d) XiPSF17P02000).
· Disconnect the connector of the speaker while removing the lid upper cover with the cassette control lid opened.
· Remove the screw ((a) XiPSN17P02000) and remove the lock support cover.
· Remove the speaker.



4. MECHANISM ADJUSTING JIGS AND PARTS

4-1. Mechanism checking and adjusting jigs

<Note: Order of descriptions> Sketch
1. Name
2. Part code
3. Code
* Model number and usage

 1. Cassette torque meter for PB 2. 9DASD-1015 3. DB * 1mN·m/1.5mN·m	 1. Torque gauge 2. JiGTG0045 3. CN * For measurement of VS-REW winding torque	 1. Torque gauge head 2. 9EQTGH-DH5000 3. BW * For torque gauge shown left	 1. Tension gauge 4N 2. JiGSG0400 3. BK * For measurement of pinch roller press force	 1. Dial tension gauge 2. 9DAPTG-10-10W 3. CA * PTG-10
 1. Torque driver 150mN·m 2. JiGTD1500RTDH 3. CB	 1. Master plane 2. 9EQMP-VLPD1 3. CL * For checking of height of reel table	 1. Height adjustment jig 2. 9DAHG-PD1 3. BZ * For height adjustment	 1. Driver for height adjustment 2. 9EQDRiVER-DH5 3. BC	* For adjustment of guide roller * Bit shape (see figure below) 
 1. Alignment tape – (I) 2. VR3-GAZXS 3. CF * Adjustment of running system (Linear signal)	 1. Alignment tape – (II) 2. VR3-JPZQS 3. CG * For adjustment of SW point(Color bar signal) * 90ADVC-TAPEPAL available	 1. Bit for hexagon nut with opposite side distance of 3 mm 2. 95CM22001 3. BL * For installation of Tu guide nut	<Miscellaneous> (1) Vernier calipers (2) Precision screwdriver (Phillips head and slotted) (3) Long-nose pliers (with thin tips) (4) Tweezers	

4-2. Parts for periodic inspection and maintenance

<Note: Order of descriptions>
1. Name
2. Part code
3. Code
* Model number and usage

1. Oil Cosmo Hydro HV22 2. 9EQ-OiL-HV22 3. AE * Cosmo Oil Co., Ltd.	1. Cleaning paper 2. JiGDUSPER 3. AP * DUSPER ∑ (SIGMA) (Ozu Co., LTD.)	1. Dry grease CFD-409Z * Sankei Chemical Co., LTD.	1. Cleaning liquid Industrial ethyl alcohol * Commercial item
		1. Grease Molykote YM-103 2. 99FGREASEYM103 * Dow Corning	1. Loctite adhesive (1401B) * Three Bond
			1. Ultrathin cotton swab * Commercial item

<How to make mechanism checking and adjusting jigs>

(1) Reel hub for back tension measurement (Fig.1)

1) Have the reel hub of a commercially available cassette tape ready.(Disassemble the cassette tape and remove the tape from the reel hub.)
2) Attach one end of a thread (having a length of about 20cm) to the reel hub using Scotch tape etc.
3) Attach a weight of about 0.21N to the top face of the reel hub.

(2) Thread for pinch roller press force measurement

1) Have a commercially available thread having a length of about 20cm ready.
2) Tie both ends together to loop the thread.

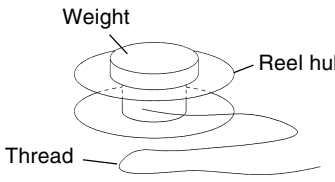


Fig. 1

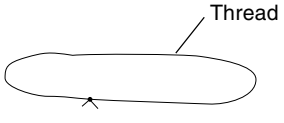


Fig. 2

5. INSPECTION AND MAINTENANCE ITEMS AND INTERVALS

In order to maintain the quality of the mechanism section, perform the following maintenance and inspection. After repairing the mechanism section, perform the following maintenance regardless of the number of hours of use by the user.

5-1. Maintenance and inspection list

○ • • • Replace. □ • • • Clean. △ • • • Lubricate. ★ • • • Check.

	Inspection and maintenance location	Number of hours of use (h) 500	1,000	1,500	2,000	3,000	Symptoms observed at the time of maintenance	Notes and remarks
Running system	Tape running section (See7-3.)	□	□	□	□	□	• Block noise • Clogging of head • Damage to tape	**Note:** If no envelope output is obtained in spite of the video head being cleaned, replace the drum component. (If the envelope output is normal, refer to "10. USEFUL TIPS".)
	Drum section, Video head (See 7-3.)	□	□	□	□	□		
		<Rollers> • Replace if abnormal rotation or swing (large) is found. <Others> • Cleans the portions that come in contact with the tape (the lower drum helical portion in particular). Use the specified cleaning liquid.						
Driving system	Pinch roller	□	□	□	□○	□	• Tape not running • Tape sagged • Block noise • Abnormal noise	• Replace if any abnormal condition is found.
	Capstan motor (Timing belt)	—	○	—	○	○		
	Swing arm S reel table, Tu reel table	—	★○	—	★○	★○		
	Center gear boss Relay pulley shaft	—	△	—	△	△	• Abnormal noise	• Apply oil. [Oil] Cosmo Hydro HV22 **Note:** Apply oil to the shaft and lightly wipe it off with a cloth.
	Loading motor Mode SW	—	★○	—	★○	★○	• Ejecting cannot be made. • Mode cannot be set.	• Replace if any abnormal condition (noise etc.) is found.
Performance check	Abnormal noise	★	★	★	★	★	• Tape not running • Tape sagged • Damage to tape • Abnomaly in reproduced picture	• If a part is out of spec, replace it.
	PB and VS/R winding torque	—	★	—	★	★		
	PB, VS/R and loading back tension S reel table unloaded torque	—	★	—	★	★		

[Oil] Cosmo Hydro HV22
[Grease] Molykote YM-103
Sankei Chemical CFD-409Z

[Loctite adhesive] Three Bond 1401B
[Cleaning liquid] Industrial ethyl alcohol

5-2. Cautions in handling the mechanism

(1) Cut washers removed at the time of part replacement etc. should be replaced with new ones without fail.
(2) Because no volume adjustment is available in this mechanism, cleaning or part replacement should be performed if the setting is not satisfied.
(3) About oil
  a) Be sure to use the specified oil. (If any oil other than the specified oil is used, various troubles will occur.)
  b) When lubricating the bearing, be sure to oil free from foreign particles such as dust. (If oil in which foreign particles such as dust are mixed is used, it will cause wear and seizure to the bearing.)
  c) The term "One drop of oil" here means the amount of oil on the point of a needle etc. shown in Fig.1.
(4) Repairing of circuits, final adjustment of running system, etc. should be performed with the cassette controller assembly installed in the mechanism.
(5) When operating the mechanism singly, apply voltage to the loading motor to drive it. The voltage between the terminals should be 3 to 4V DC. (Do not apply external voltage to the loading motor with the mechanism connected with the main circuit board. Doing so could cause a failure.) (Turning the gears forcedly by hand may cause them to get damaged.) When placing the mechanism singly, use an appropriate spacer so that the capstan motor is not rubbed.
(6) When installing the cassette controller, push the portion indicated by "A" in Fig.2. Do not push other portions.
(7) Take care not to deform the components of the mechanism.

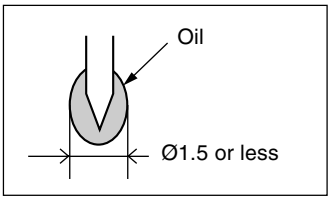


Fig. 1

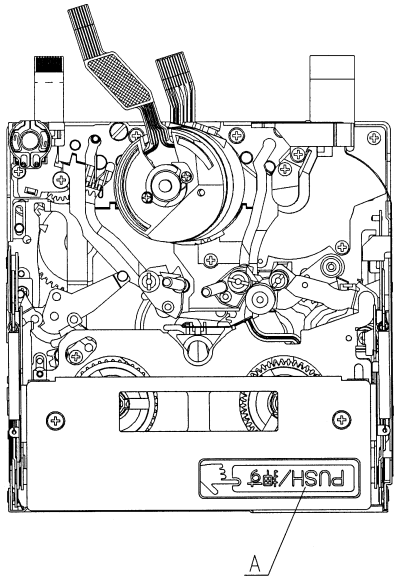


Fig. 2

6. ADJUSTING AND CHECKING OF MECHANISM

The items described here are relevant to the general on-site servicing (field service). This section does not cover adjustment and replacement for which sophisticated equipment, jigs and techniques are required.
In order to maintain the initial characteristics of the mechanism, it is necessary to perform maintenance and inspection and also it is essential not to damage the tape etc. In the case of an adjustment that requires a jig, be sure to use the specified jig.

<Caution>
(1) When adjusting and checking the mechanism, be sure to see that the power supply and the status are as indicated in Caution on the title.
(2) Do not apply external voltage to the loading motor with the mechanism connected with the main circuit board. (Doing so could cause a failure.)
(3) When running the tape, be sure to do so with the cassette controller assembly installed.

6-1. Checking of PB (REC) winding torque

AC adapter used, Cassette controller assembly installed

(1) Set the torque cassette with the cassette controller installed in the mechanism. In the SP record mode (or in the PB mode if signals have been SP-recorded on the tape), check that the winding torque is within spec.
<Spec for PB (REC) winding torque>(If there is a torque ripple, read the center value.)
0.7+0.2/-0.05N·m, Ripple: 0.1mN·m or less

6-2. Checking of VS-REW winding torque

AC adapter used, Cassette controller assembly not installed (Mechanism only)

(1) Remove the cassette controller, turn ON the down SW while referring to 8-3, operate in the test mode (T01) and select the VS-REW mode.
(2) Set the torque gauge in the S reel table, push the tip of the tension pole with your finger in the direction shown by Arrow A to release the tension band, and check that the winding torque is within spec. (Fig.1) (Do not apply the own weight of the torque gauge or rotate it during measurement.)
<Spec for VS-REW winding torque>
(If there is a torque ripple, read the center value.)
1.5 ± 0.15N·m, Ripple: 0.15mN·m or less
(3) After checking the winding torque, remove the torque gauge and turn OFF the down SW. The mechanism will automatically go into the standby mode.

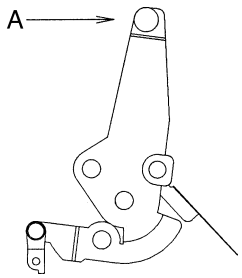


Fig.1 How to release the tension band when measuring the VS-REW winding torque

6-3. Checking of height of reel table

3 to 4V DC, Cassette controller assembly not installed (Mechanism only)

(1) Remove the cassette controller. (Refer to 8-2.)
(2) Apply 3 to 4V DC to the loading motor while referring to 8-1 and select the PB mode.
(3) Fit the holes of the master plane to the two guides (portions A and B) shown in the Fig.2, taking great care not to allow master plane to strike the running parts such as the drum and guide roller or the MIC contact.
(4) Using a pair of vernier calipers etc., measure the heights of the reel-supporting faces of the S reel table and Tu reel table from the top face of the master plane and check that the measured heights satisfy the set values. (Fig.3)
When measuring the height of the S reel table, push the tip of the tension pole with your finger in the direction shown by Arrow A to release the tension band. (Fig.1)
(5) If the measured height does not satisfy the set value, replace the reel table and make checking again.
<Note> After replacement, select the L start mode (see 8-1) and check that the reel table rotates smoothly.

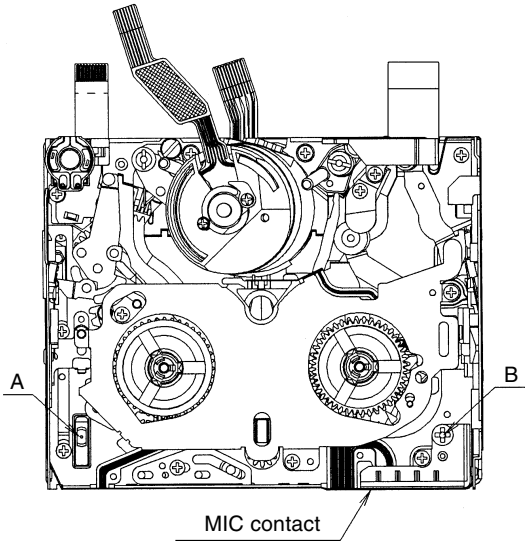


Fig.2 Checking of reel table

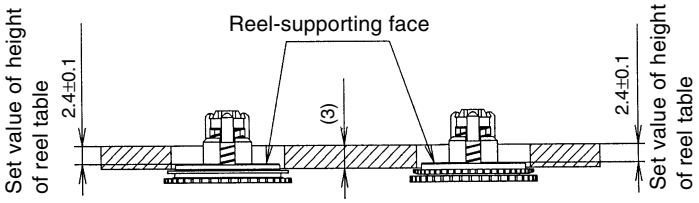


Fig.3

6-4. Checking and adjusting of tension pole position during REC (PB)

3 to 4V DC, Cassette controller assembly not installed (Mechanism only)

(1) Checking

Check that the tension pole is located in the prescribed position as shown in Fig.4 at the start of a 60-minute tape.

If the tension pole is not located in the prescribed position, take out the tape and make adjustment according to the procedure shown below.

(2) Adjusting (See Fig.4.)

1. Select the PB mode without setting a tape.
2. Slightly loosen the screw 1 (to such an extent that the T band adjustment base 2 can be moved.)
3. If the tension pole is dislocated inward from the prescribed position, shift the T band adjustment base 2 in the direction shown by Arrow (A). If it is dislocated outward from the prescribed position, shift the T band adjustment base 2 in the direction shown by Arrow (B). Then fix the T band adjustment base 2 with the screw 1.
   (For how much the T band adjustment base is to be shifted, refer to Fig.4.)
4. Check the tension pole position as described in "(1) Checking" above.
5. If out of position, make readjustment.

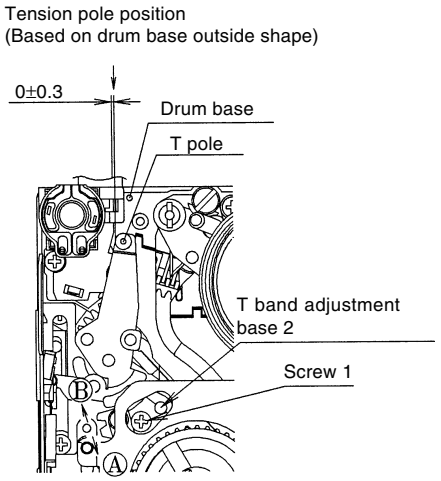


Fig.4 Adjusting of position (tape exists)

6-5. Checking and adjusting of REC (PB) back tension torque

AC adapter used, Cassette controller assembly installed

(1) Checking

Set the torque cassette (SD-1015). In the SP record mode (or in the PB mode if signals have been SP-recorded on the tape), check that the feed-side torque is within the following spec.

<Spec>(If there is a torque ripple, read the center value.)

0.4 ± 0.05 mN·m

(2) Adjusting (See Fig.5.)

If the measured back tension torque is out of spec, make adjustment according to the following procedure.

1. Slightly loosen the screw 3.
2. If the back tension is higher, shift the T-SPR adjustment ANG in the direction shown by Arrow (D). If it is lower, shift the T-SPR adjustment ANG in the direction shown by Arrow (C).
3. After adjusting the back tension torque, fix the T-SPR adjustment ANG with the screw 3. Apply loctite adhesive to screw 3.

<Reference>

Screw tightening torque: 0.04 N·m

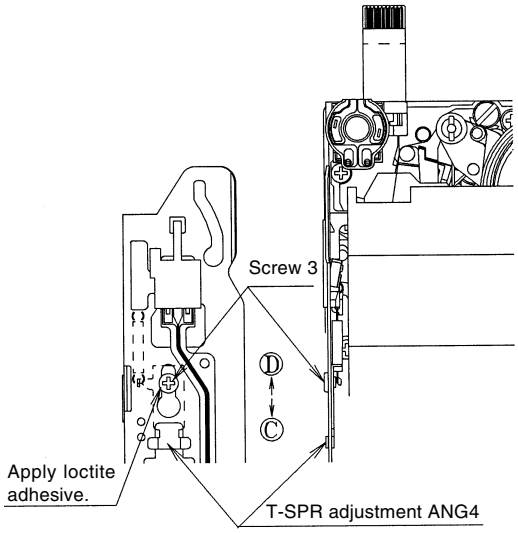


Fig.5 Checking (tape exists)

6-6. Checking of S reel table unloaded torque

3 to 4V DC, Cassette controller assembly not installed (Mechanism only)

(1) Remove the cassette controller assembly, apply 3 to 4V DC to the loading motor and select the L start mode. (See 8-1.)

(2) Move the swing arm to the Tu reel table side. At this time, take care not to damage the gears etc. (See Fig.6.)

(3) Set the reel hub for back tension measurement on the S reel table.

(4) Using the dial tension gauge, pull the thread of the reel hub in the direction shown by Arrow A and check that the tension is within spec.

<Spec>

(If the tension fluctuates, read the center value.)

10mN or less

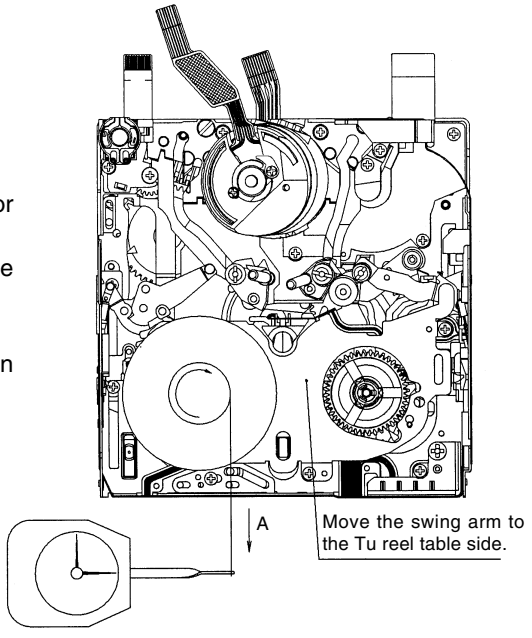


Fig.6 How to measure the S reel table unloaded torque

6-7. Checking of loading back tension

3 to 4V DC, Cassette controller assembly not installed (Mechanism only)

(1) Apply 3 to 4V DC to the loading motor and select the L start mode. (See 8-1.)
(2) Move the swing arm to the S reel table side. At this time, take care not to damage the gears etc. (See Fig.7.)
(3) Set the reel hub for back tension measurement on the Tu reel table.
(4) Using the dial tension gauge, pull the thread of the reel hub in the direction shown by Arrow A and check that the tension is within spec.

<Spec>
(If the tension fluctuates, read the center value.)
27.5 ± 7.5mN

6-8. Checking of VS-REW back tension

3 to 4V DC, Cassette controller assembly not installed (Mechanism only)

(1) Apply 3 to 4V DC to the loading motor and select the VS-REW mode. (See 8-1.)
(2) Move the swing arm to the S reel table side. At this time, take care not to damage the gears etc.
(3) Set the torque gauge in the Tu reel table.
(4) While turning the torque gauge counterclockwise (one turn in three seconds), check that the torque is within spec.

<Spec>
(If the tension fluctuates, read the center value.)
0.8+0.2/-0.05mN·m

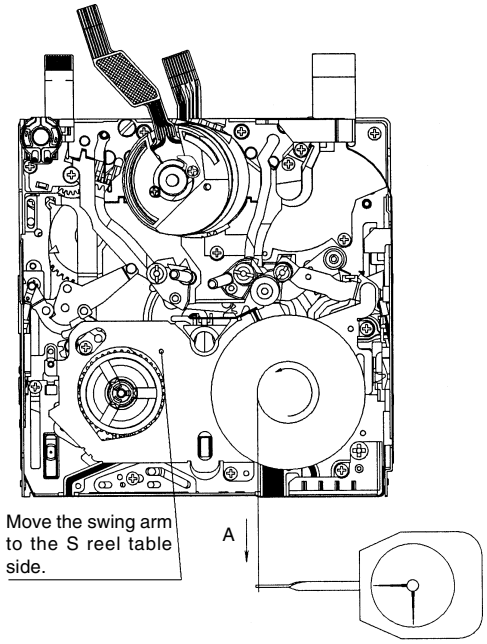


Fig.7 How to measure the loading back tension

6-9. Checking of pinch roller press force

3V DC, Cassette controller assembly not installed (Mechanism only)

(1) Hook the thread for pinch roller press force measurement over the pinch lever (position A in Fig.8).
(2) Put the mechanism into the PB mode to press the pinch roller against the capstan shaft.
(3) Hook the thread for pinch roller press force measurement over the tension gauge and pull the tension gauge in the direction shown by Arrow B in Fig.10 so that the pinch roller is slightly separated from the capstan shaft.
(4) Return the pinch roller gradually and read the value indicated when the pinch roller comes in parallel contact with the capstan shaft (see Fig.9). Check that the read value is within the following spec.

<Spec>
2.1+0.4N

<Note> After measuring the press force of the pinch roller, promptly exit from the PB mode to separate the pinch roller from the capstan shaft. (If the pinch roller is left pressed against the capstan shaft for a long time, the pinch roller will be deformed.)

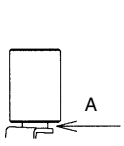


Fig.8

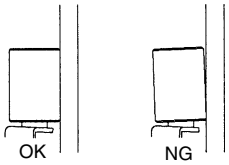


Fig.9

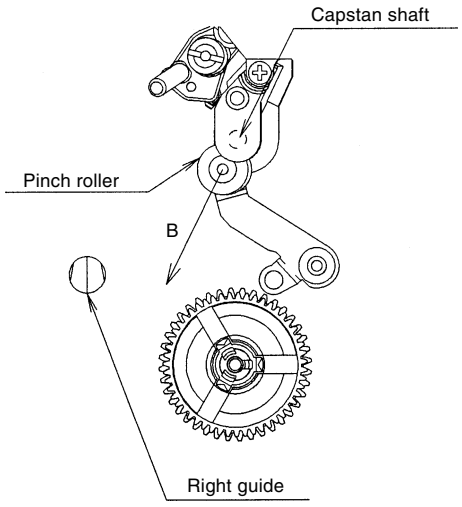
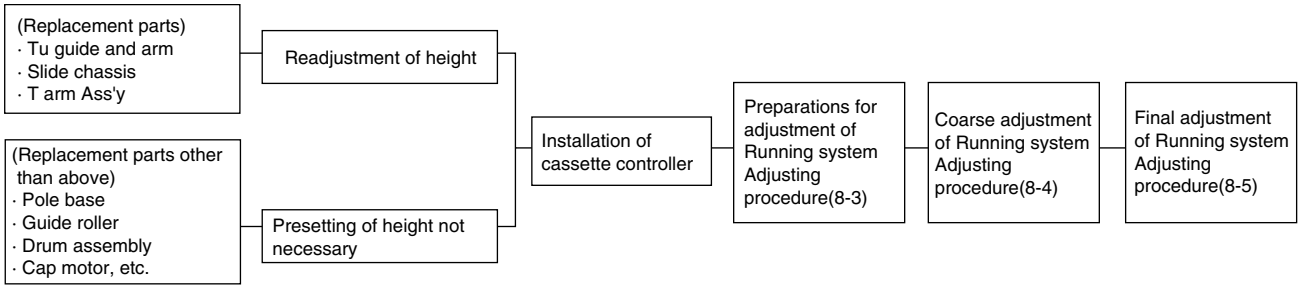


Fig.10

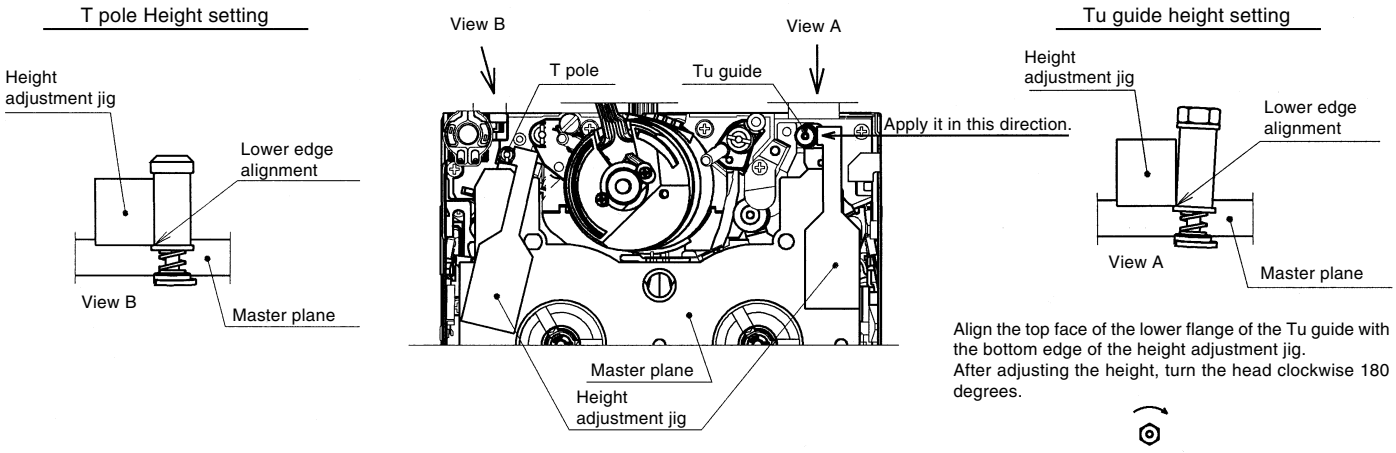
7. ADJUSTMENT OF RUNNING SYSTEM

7-1. Outline of adjustment of running system


(Replacement parts)
· Tu guide and arm
· Slide chassis
· T arm Ass'y
Readjustment of height
(Replacement parts other than above)
· Pole base
· Guide roller
· Drum assembly
· Cap motor, etc.
Presetting of height not necessary
Installation of cassette controller
Preparations for adjustment of Running system Adjusting procedure(8-3)
Coarse adjustment of Running system Adjusting procedure(8-4)
Final adjustment of Running system Adjusting procedure(8-5)

7-2. Adjustment of height of running system

· After replacement of the T pole, Tu guide and slide chassis, adjust the height of the T pole/Tu guide using the height adjustment jig.
· If wrinkles are found in the tape, turn the Tu guide to remove them.
(For further details, refer to "Coarse adjustment of running system".)
· After adjusting the T pole and Tu guide height, apply screw loctite at the tip of the shaft.


T pole Height setting
Height adjustment jig
Lower edge alignment
View B
Master plane
View B
View A
T pole
Tu guide
Apply it in this direction.
Master plane
Height adjustment jig
Tu guide height setting
Height adjustment jig
Lower edge alignment
View A
Master plane
Align the top face of the lower flange of the Tu guide with the bottom edge of the height adjustment jig.
After adjusting the height, turn the head clockwise 180 degrees.

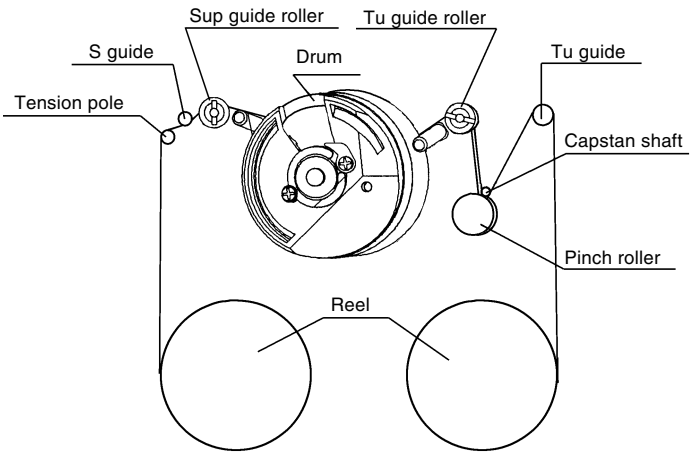
7-3. Preparations for adjustment of running system

Measuring instrument and Jig : Oscilloscope, Adjustment remote control, Height adjustment screwdriver, Alignment tapes (for adjustment of running system and adjustment of SW point), Master plane, Height adjustment jig

<Method and description>

(1) Clean the surfaces that come in contact with the tape. (Clean well the drum surface and the lower drum helical surface in particular.)
(2) Install the cassette controller.
(3) Connect the oscilloscope to each TP of the joint circuit board.
(4) Turn ON the power of the AC adapter.
(5) Select TEST mode T-05 with the adjustment remote control.
(6) Play back the alignment tape for running system adjustment and check that the tape is moving in the SP mode.
(7) While observing the PB envelope on the oscilloscope, adjust the running system so that the envelope becomes flat in states of [+1/4 shift] and [-1/4 shift].
(Each time the PB key is pressed, the shift amount changes as shown below.)

[+1/4 shift] ⇨ [Normal] ⇨ [-1/4 shift] ⇨ [Normal]



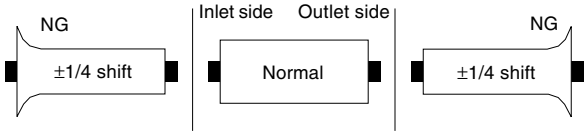
7-4. Coarse adjustment of running system

(Cassette controller installed)

1. Adjustment of height of Su and Tu guide rollers

<Method and description>

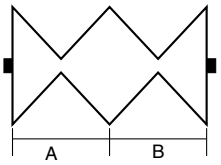
(1) Play back the alignment tape for running system adjustment and make adjustment so that the inlet and outlet sides of the envelope become flat.
(2) In states of [+1/4 shift] and [-1/4 shift], make adjustment in the same manner as described in (1) above.



2. Checking of V/SR envelope waveform

<Method and description>

(1) In the V/SR mode, check that the envelope waveform is shaped uniformly.
(2) If the envelope waveform is not shaped uniformly, fine-adjust the guide roller and Tu guide.

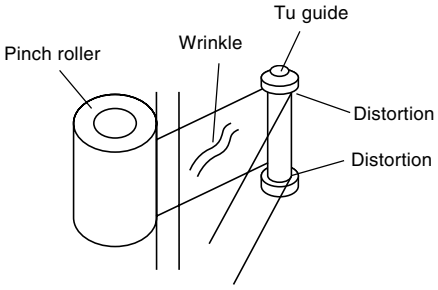


Make adjustment so that A≒B.

3. Checking for wrinkles in tape

<Method and description>

(1) In the PB mode and V/SR mode, check the tape for distortion between the Tu guide and the pinch roller.
⇨ If wrinkles are found, make adjustment within a range of ±180 degrees.
⇨ After making adjustment, apply loctite adhesive to the tip of the shaft.



4. Checking of envelope waveform rise time

<Method and description>

(1) Check the envelope waveform rise time in switching from the V/SR mode to the PB mode. ⇨ 5 seconds or less
(2) Check the envelope waveform rise time in switching from the STOP mode to the PB mode. ⇨ 5 seconds or less

7-5. Final adjustment of running system

(Cassette controller installed)

1. Adjustment of height of Sup and Tu guide rollers

<Method and description>

(1) If the ratio of MIN to MAN of the envelope waveform is less than 60%, adjust the height of the guide roller again. (See Fig.1.)
(2) Perform unloading and then loading again, select the PB mode and check that there are no significant changes in the envelope waveform.

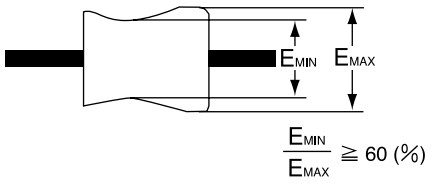


Fig.1

2. Adjustment of PB SWP

<Method and description>

(1) Play back the alignment tape for SW point adjustment.
(2) Using the adjustment remote control, make SWP automatic adjustment.
(3) Check that an OK is given as a result of self-judgment. In the case of a NG, adjust the GR height again.

* After replacement of the mechanism and drum, adjust the phase and equalizer using the adjustment remote control. (Refer to "**9. METHOD OF ADJUSTING THE ELECTRICAL CIRCUITS**".)

8. ASSEMBLING OF MECHANISM SECTION AND PART REPLACEMENT (DISASSEMBLING AND ASSEMBLING)

This section describes the method of assembling the mechanism section and the method of part replacement.
For how to remove the cabinet etc., refer to "**3. DISASSEMBLY OF THE SET**".

<Cautions>
1. Cut washers removed at the time of part replacement etc. should be replaced with new ones without fail.
2. When assembling the mechanism, take care to prevent screws, washers and foreign matter from getting into it. If such things get into the mechanism, it will cause the mechanism to malfunction.
3. Be sure to use the specified cleaning liquid, oil, grease and loctite adhesive shown below. Failure to do so will cause the mechanism to malfunction.

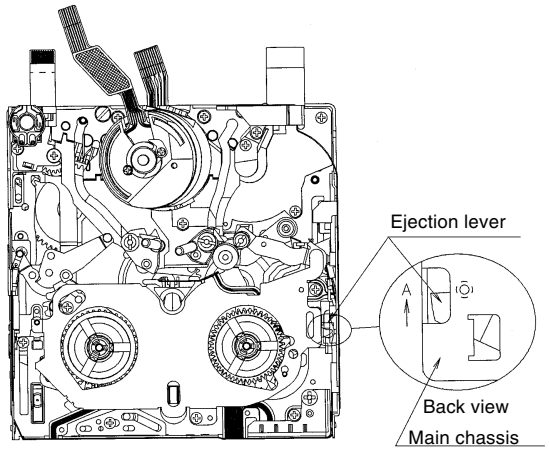
Oil: Cosmo Hydro HV22 (Cosmo Oil) Loctite adhesive: 1401B (Three Bond)
Grease: Molykote YM-103 (Dow Corning), Suncall CFD-409Z (Sankei Chemical Co., LTD.)
Cleaning liquid: Industrial ethyl alcohol

8-1. Mechanism mode

To operate the mechanism singly, apply 3 to 4V DC to the loading motor.
(Do not apply external voltage to the loading motor with the mechanism connected with the main circuit board. Doing so could cause a failure.)

(1) Ejection mode

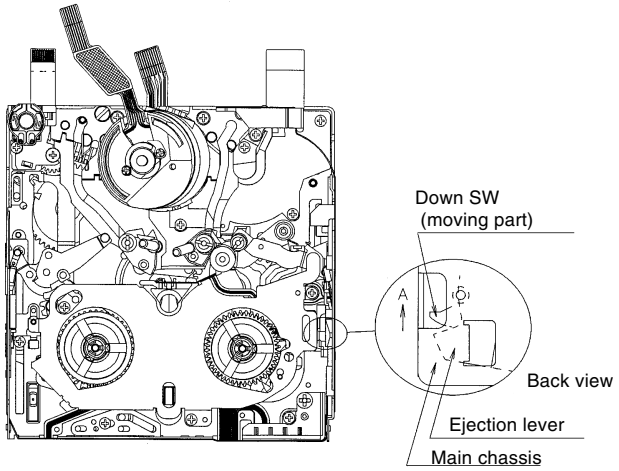
This mode is used to take out a cassette. In this mode, the ejection lever is shifted farthest in the direction shown by Arrow A. (In this mode, the cassette controller assembly cannot be locked.)



EJECTION MODE

(2) Standby mode

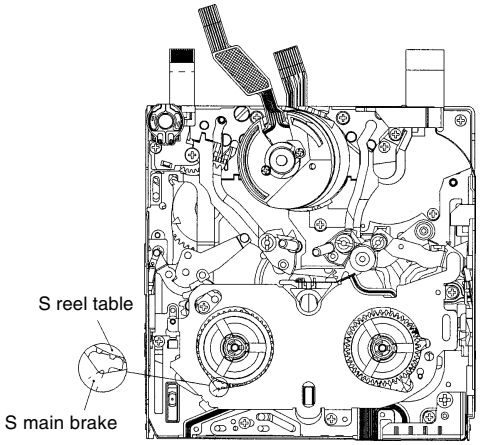
This mode is used to set a cassette. In this mode, the slide chassis is farthest away from the drum and the ejection lever is turned (the cassette controller assembly can be locked). (The tip of the ejection lever is hidden behind the main chassis and the moving part of the down SW is visible.)



STANDBY MODE

(3) L start mode

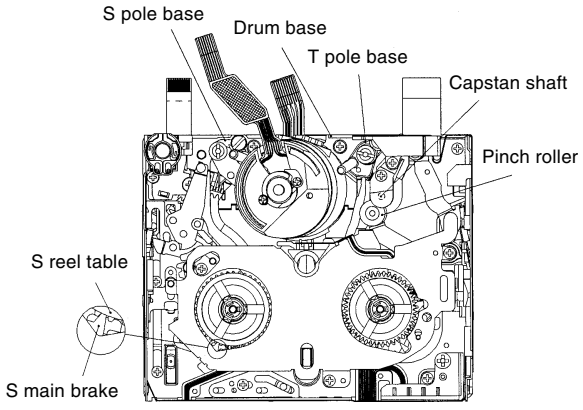
This mode is used for the Tu reel hub to take up the tape of a cassette whose leader tape is visible. (In this mode, the S main brake is located away from the S reel table.)



L START MODE

(4) Stop mode

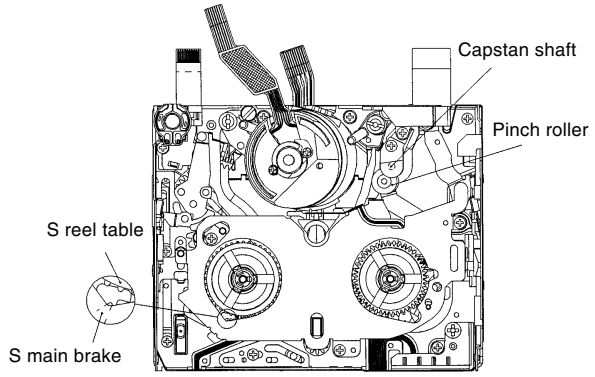
This mode is used for stopping (camera mode: RecLock). In this mode, the S and T pole bases are pressed against the drum base and the S main brake is engaged with the S reel table. However the pinch roller and capstan shaft are separated.



STOP MODE

(5) PB (Record, Fast forward, Fast rewind, VSF and VSR) mode

This mode is used for playback, recording, fast-forwarding, fast -rewinding, VSF and VSR. In this mode, the pinch roller is pressed against the capstan shaft and the S main brake is located away from the S reel table.



PB (RECORD, FAST FORWARD, FAST REWIND, VSF AND VSR) MODE

8-2. Cassette controller assembly

<Procedure for removing the cassette controller> (The cassette controller can be installed and removed without removing the cover.)

(1) Apply 3 to 4V DC to the loading motor to establish the standby mode. When removing the cover from the cassette controller, remove the tow screws (A). (See Fig.1.)

(2) Push the lock lever in the direction shown by the arrow and move up the cassette controller. (See Fig.2.)

(3) Remove the two screws (C) and remove the down guide (D) in the direction shown by the arrow (E). (See Fig.3 and Fig.4.)

(4) Shift the cassette controller in the direction shown by the arrow (F), remove the inner arm guide shaft L and the groove of the inner arm R toward the inside of the mechanism, and turn the cassette controller. (See Fig.5 and Fig.6.)

(5) Turn the cassette controller in the direction shown by the arrow (H) and shift it in the direction shown by the arrow (I) to remove it from the slide chassis. (See Fig.7.)

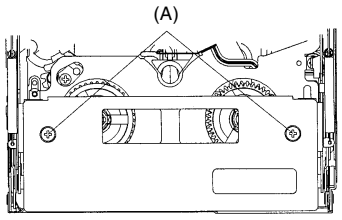


Fig.1

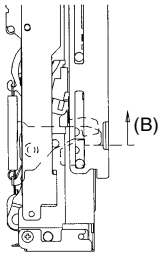


Fig.2

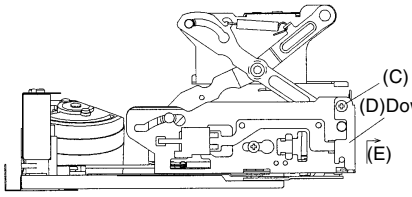


Fig.3

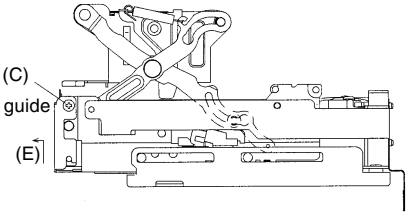


Fig.4

At this position, remove the groove of the inner arm R toward the inside of the mechanism.

At this position, remove the inner arm guide shaft L toward the inside of the mechanism.

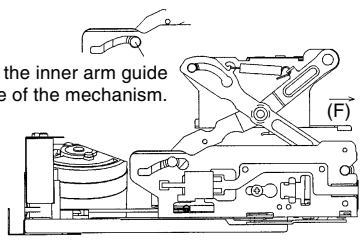


Fig.5

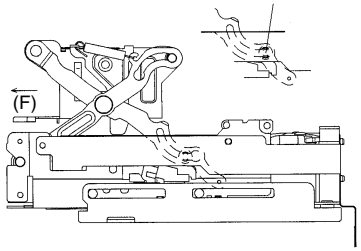


Fig.6

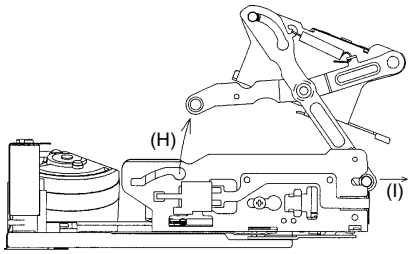


Fig.7

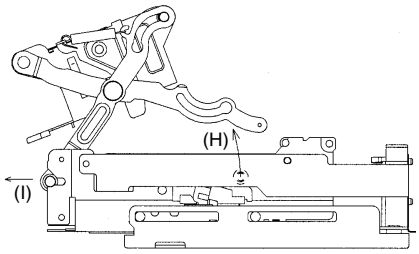


Fig.8

8-3. Method of operating on the circuit board with the cassette controller assembly removed

If this method is performed improperly, the tape may be damaged. Therefore do not use this method except in special cases such as measuring the VSR torque. Be sure to follow the cautions shown in this manual.

(1) Apply 3 to 4V DC to the loading motor to establish the standby mode.
(2 Insert a sheet of thick paper folded in two as shown in Fig.9 into the position shown in Fig.10 to turn OFF the down SW. (Pass the paper along the heavy line in the figure.)
Note) To go into the REC mode, press the pin of the recognition SW.
(3 Selecting the test mode (T-01) with the adjustment remote control without setting a tape will make it possible to operate the mechanism with the mode keys.
(4) For ejecting, remove the paper inserted in step (2) above.

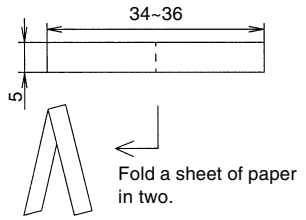


Fig.9

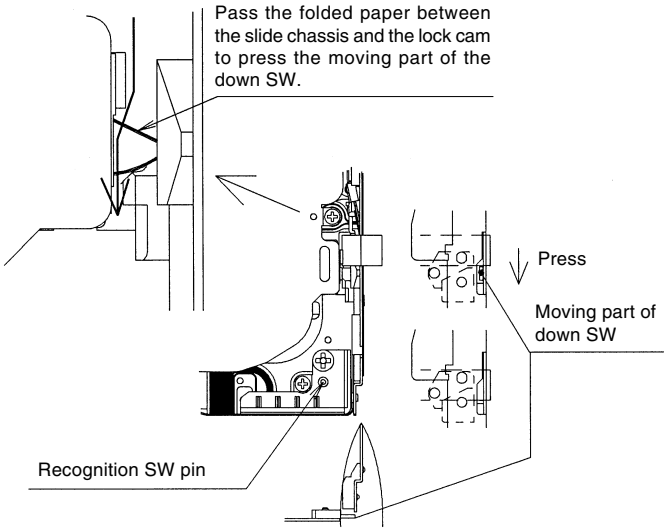

Pass the folded paper between the slide chassis and the lock cam to press the moving part of the down SW.
Press
Moving part of down SW
Recognition SW pin

Fig.10

8-4. Phase-adjust

Phase-adjust the following parts.

(1) Mode SW
(2) Main cam
(3) Sub cam (The main cam and sub cam should be also phase-adjusted for the chassis.)
(4) S loading arm
(5) Tu loading arm
(6) Loading drive gear (main cam, sub cam, S loading gear)

Note) Check the marker position carefully before disassembling.

Note) When installing the loading drive gear, check that the main cam, sub cam, S loading gear are all phase-adjusted.

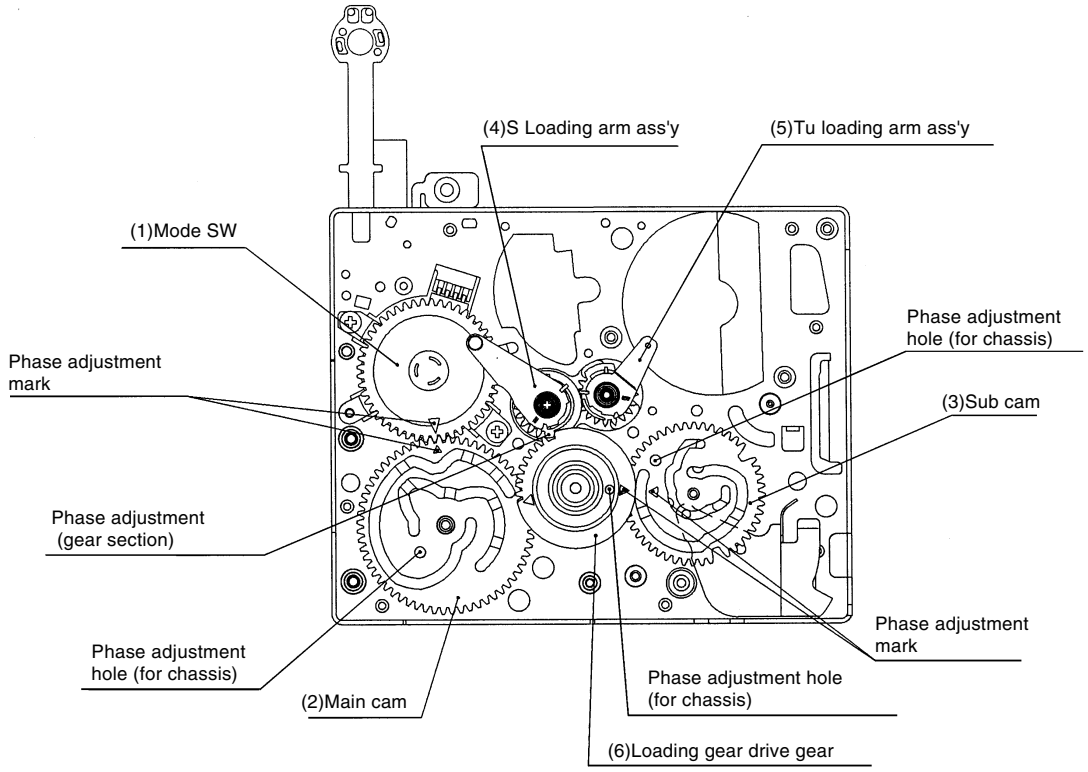


Fig.1

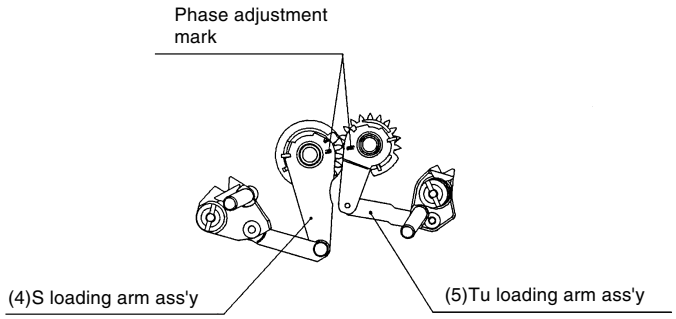


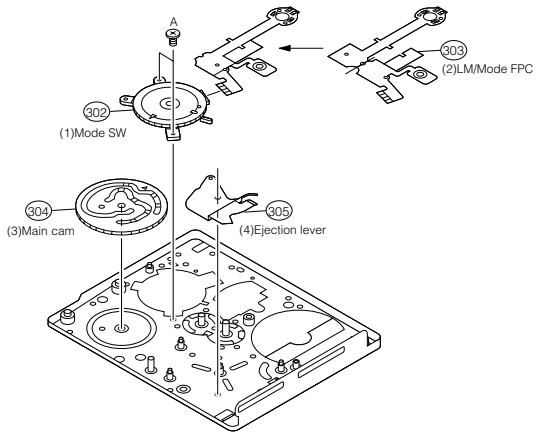
Fig.2

8-5. Assembling method

8-5-1. Method of assembling the main chassis assembly

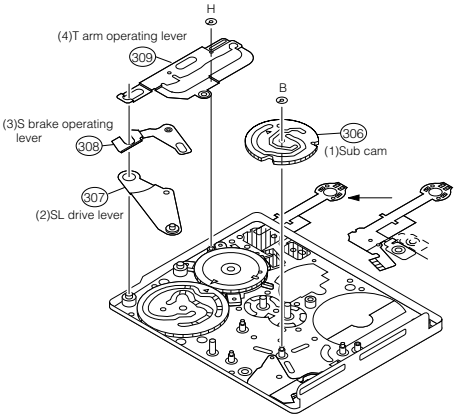
Note) For reference, numbers are prefixed to parts names to show the sequence of assembly.
(For the greasing/oiling and cleaning locations, refer to the diagram of greasing/oiling locations.)

1.



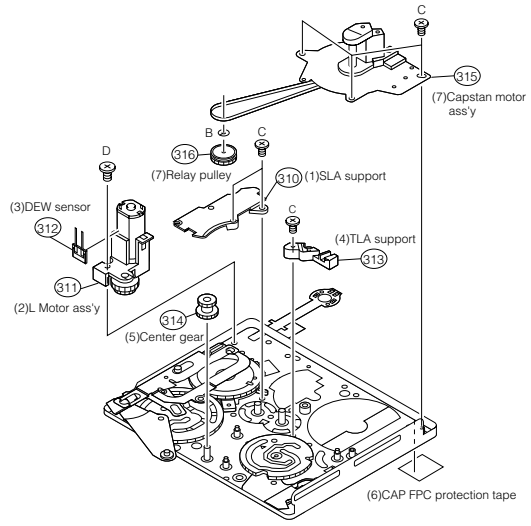
	Type	Tightening torque	Q'ty
A	M1.4xL1.6(Special screw)	0.4mN·m	2

2.



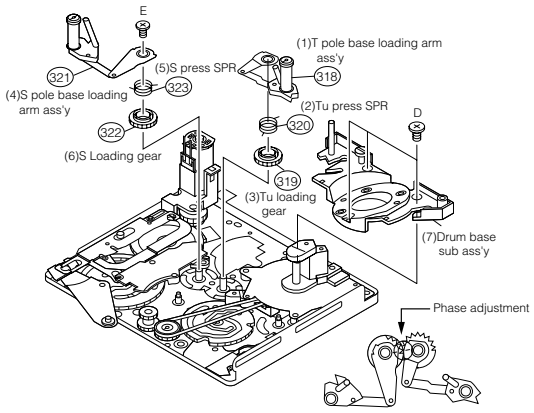
	Type	Tightening torque	Q'ty
B	CWø1.2-ø3.0t-0.25	————	1
H	CWø0.7-ø1.8-t0.2	————	1

3.



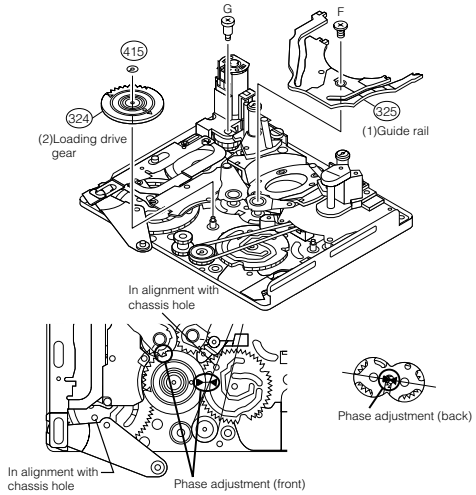
	Type	Tightening torque	Q'ty
C	S Tight M1.4xL2.0	0.4mN·m	5
D	S Tight M1.4xL3.0	0.4mN·m	1
B	CWø1.2-ø3.0t-0.25	————	1

4.



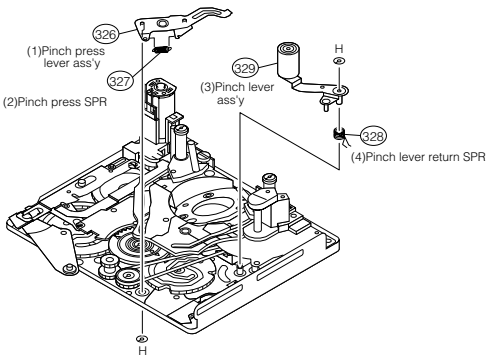
	Type	Tightening torque	Q'ty
D	S Tight M1.4xL3.0	0.4mN·m	3
E	M1.4xL2.0(t0.2 special screw)	0.4mN·m	1

5.



	Type	Tightening torque	Q'ty
F	M1.4xL1.5(t0.2 special screw)	0.4mN·m	1
G	M1.2xL4.6 (t0.2 particularly special screw)	0.4mN·m	1
415	CWø1.2-ø3.0t-0.25(Lumirror)	————	1

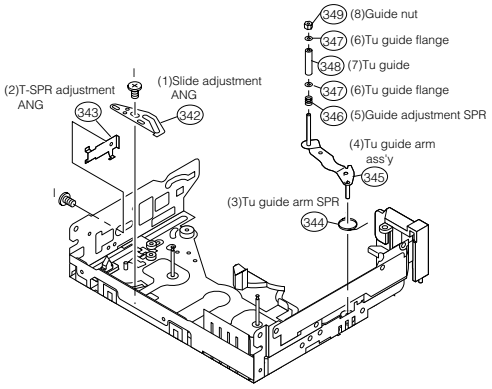
6.



	Type	Tightening torque	Q'ty
H	CWø0.7-ø1.8-t0.2	————	2

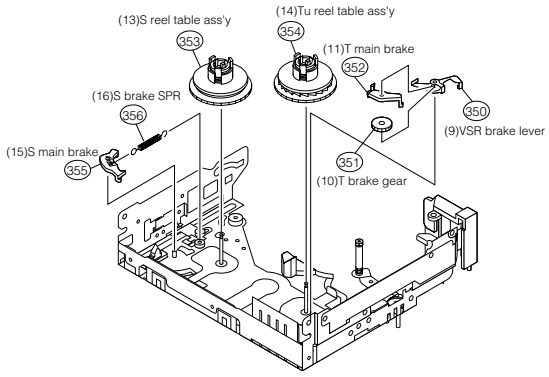
8-5-2. Method of assembling the slide chassis assembly

1.

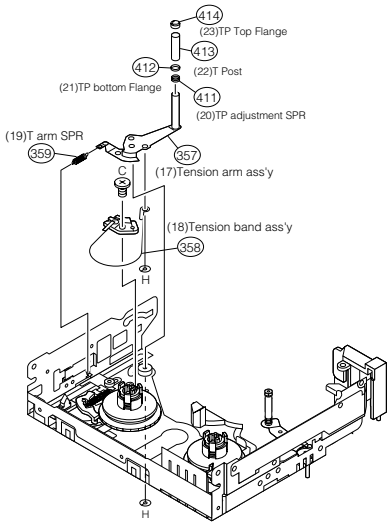


	Type	Tightening torque	Q'ty
I	Precision type 2·M1.4xL1.0	0.4mN·m	2

2.



3.



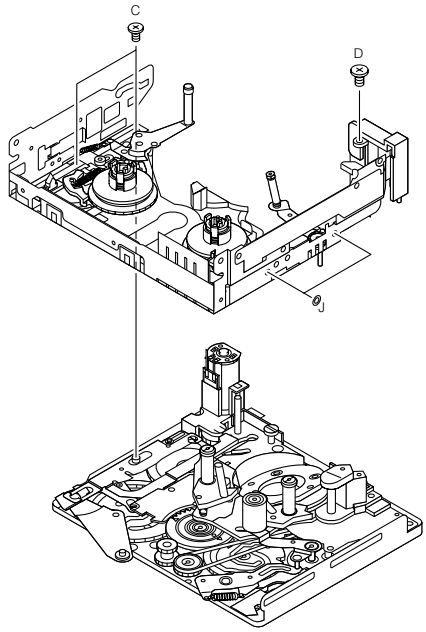
	Type	Tightening torque	Q'ty
C	S Tight M1.4xL2.0	0.4mN·m (Tightening fully)	1
		0.05mN·m (Tightening temporarily)	
H	CWø0.7-ø1.8-t0.2		2

8-5-3. Method of combining the main chassis assembly and the slide chassis assembly

(1) Position the assemblies as shown in the figure below (the pole base is slightly protruded).

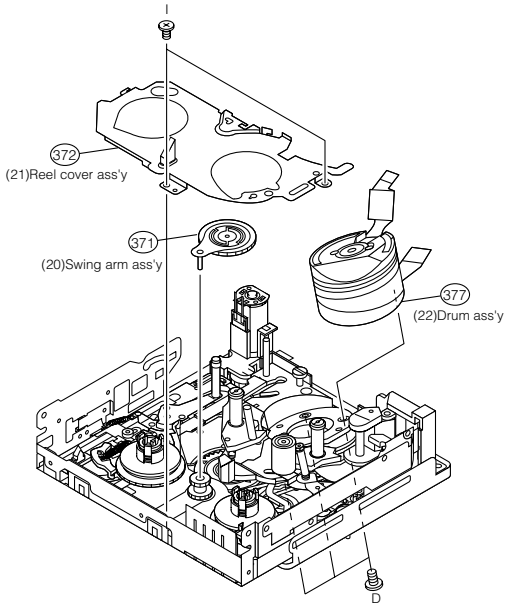
(2) Insert the operation pins (tension arm, Tu guide arm) of the slide chassis assembly into the locations of the main chassis assembly shown in the figure below, fit the SL drive lever pin of the main chassis assembly into the groove of the slide chassis (the groove of the slide adjustment ANG), and then fix with the two screws.

1.



	Type	Tightening torque	Q'ty
C	S Tight M1.4xL2.0	0.4mN·m	2
D	S Tight M1.4xL3.0	0.4mN·m	1
J	Wø2.1-ø4-t0.25	————	2

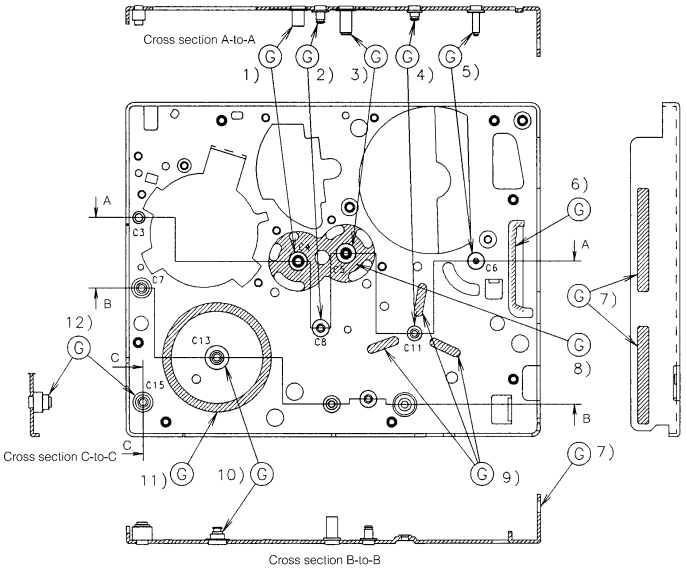
2.



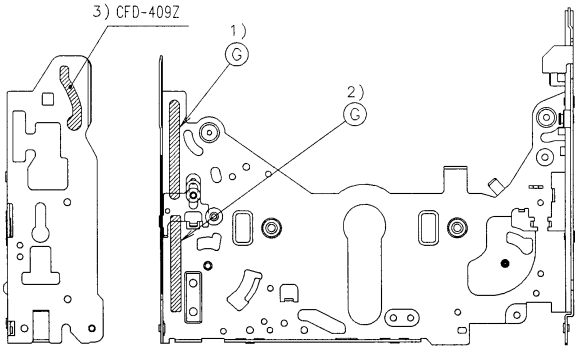
	Type	Tightening torque	Q'ty
D	S Tight M1.4xL3.0	0.4mN·m	1
I	Precision type 2·M1.4xL1.0	0.4mN·m	2

8-5-4. Diagram of greasing/oiling locations

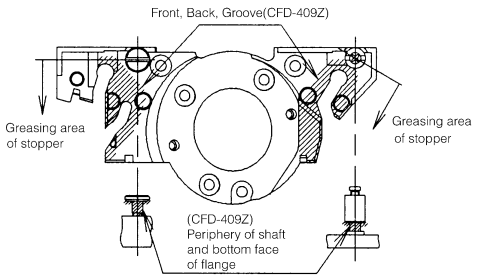
Note: About ▨ all over the figure.
Ⓖ : Molykote YM-103
CFD-409Z : Suncall CFD-409Z



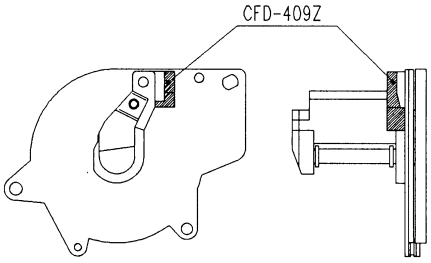
101 Main chassis Assy



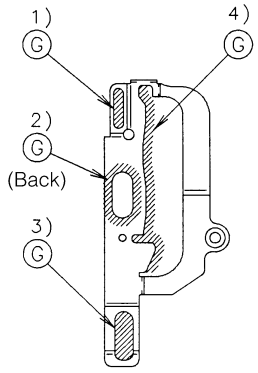
151 Slide chassis Assy


Front, Back, Groove(CFD-409Z)
Greasing area of stopper
Greasing area of stopper
(CFD-409Z) Periphery of shaft and bottom face of flange

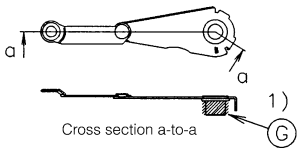
703 Drum base Assy
(Suncall CFD-409Z for all shaded areas)



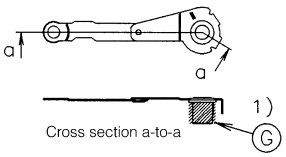
CAP motor bearing holder



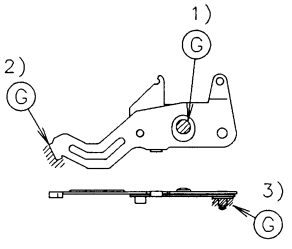
112 T arm operating lever



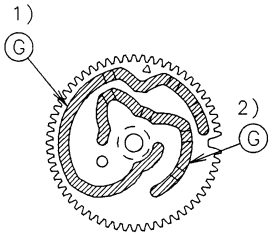
120 S loading arm Assy



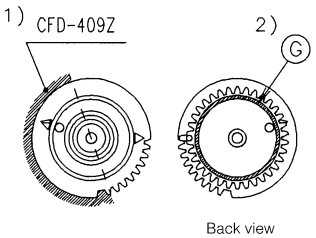
121 T loading arm Assy



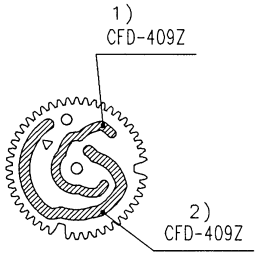
114 Pinch roller press lever Assy



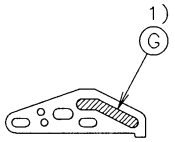
116 Main cam



204 Loading drive gear
(Can be immersed in Suncall)

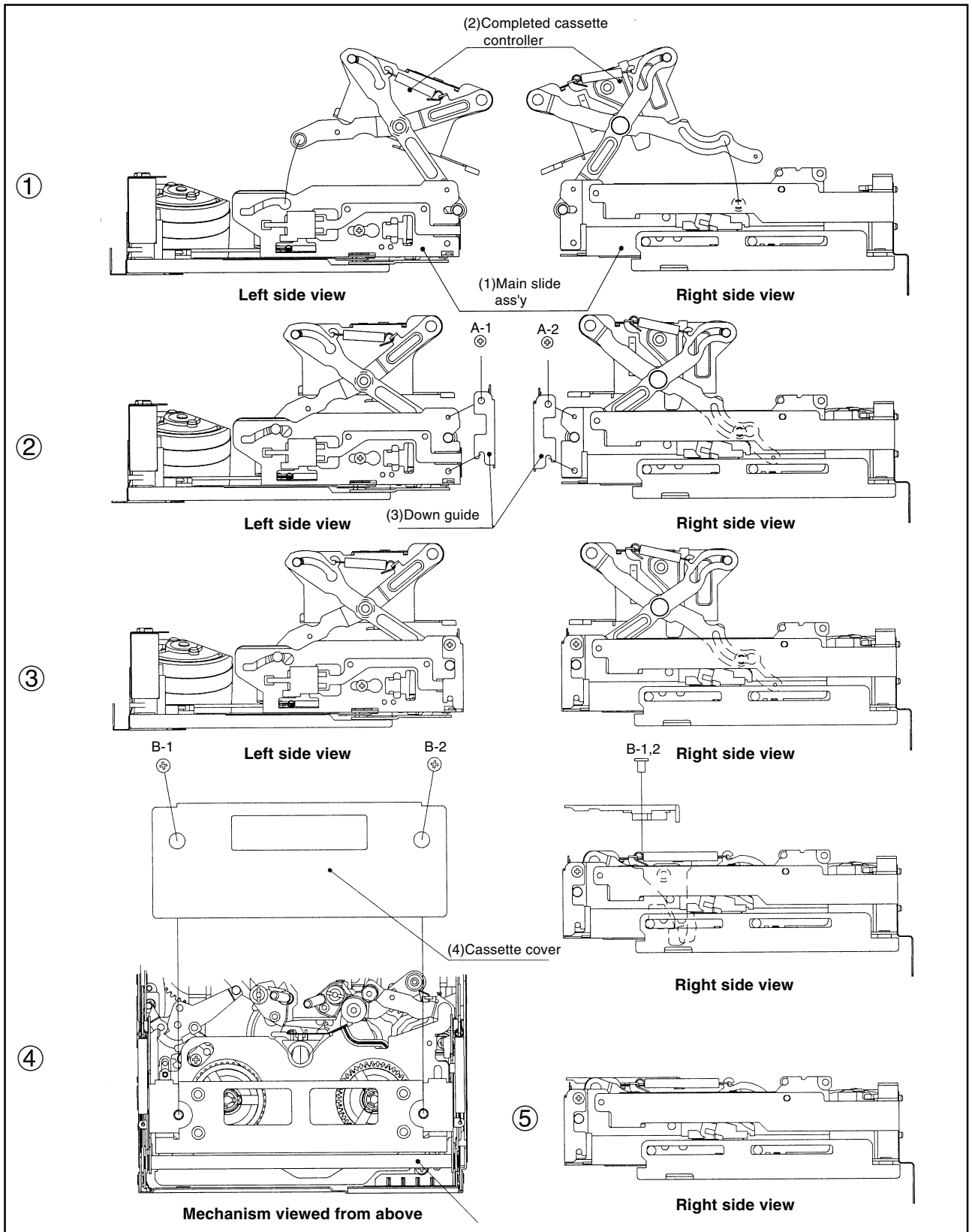


117 Sub cam
(Can be immersed in Suncall)



166 Slide adjustment ANG

8-6. Method of installing the cassette controller



C: Move down the cassette controller by pushing this portion. When the cassette controller is locked, attach the cassette cover.

	Type	Tightening torque	Q'ty
A	MI1.4xL2.0(Precision type 2)	0.4mN·m	2
B	M1.7x2.5(Precision type 2)	————	2

8-7. Method of taking out the cassette with the mechanism operating singly

(1) Apply 3 to 4V DC to the loading motor for slight unloading.
(2) If the tape is slack, turn the rotor (mechanism backside) of the capstan motor by hand to take up the slack in the tape.
(3) Repeat steps (1) and (2) above. When the pole base is completely unloaded, check that the tape is not slack.
(4) Then apply 3 to 4V DC to the loading motor again. The cassette controller will move up.
(5) Take out the cassette.
Note) When applying 3 to 4V DC to the loading motor for unloading, do so as shown in Fig.1.

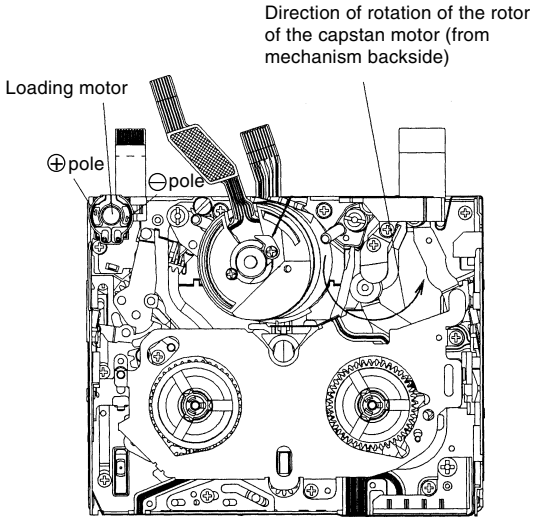


Fig.1

9. METHOD OF ADJUSTING THE ELECTRIC CIRCUIT

-Before making adjustment-

· It seems that, in most cases, this adjusting method is used when it becomes necessary to adjust the electric circuit as a result of replacement of worn mechanism parts or the video head. When adjusting the electric circuit, check that the mechanism operates properly (the mechanism is adjusted completely). If a failure occurs in the electric circuit, be sure to locate the fault using a measuring instrument and then perform repairing, replacement and adjustment, as described in this adjusting method.
Avoid performing undue adjustments etc. without using proper measuring instruments.

· The electric circuit components in the circuit board unit of this product are densely-packed into packages. Most of them are surface-mounted for downsizing.
When replacing components in servicing the product, perform replacement work swiftly with a soldering iron.
In general, surface-mounted components are inferior in heat resistance to large-sized discrete components used in TV sets, stationary decks, etc. Heating the electrode of a surface-mounted component with a soldering iron for a long time needlessly will therefore lead to a failure. Take great care not to do so.
Take special care in this respect when replacing chip multilayer capacitors in particular.
We recommend you to use a ceramic soldering iron (Tip temperature: 250°C, Contact time: 5 seconds or less).

9-1. Adjustment of liquid crystal video section

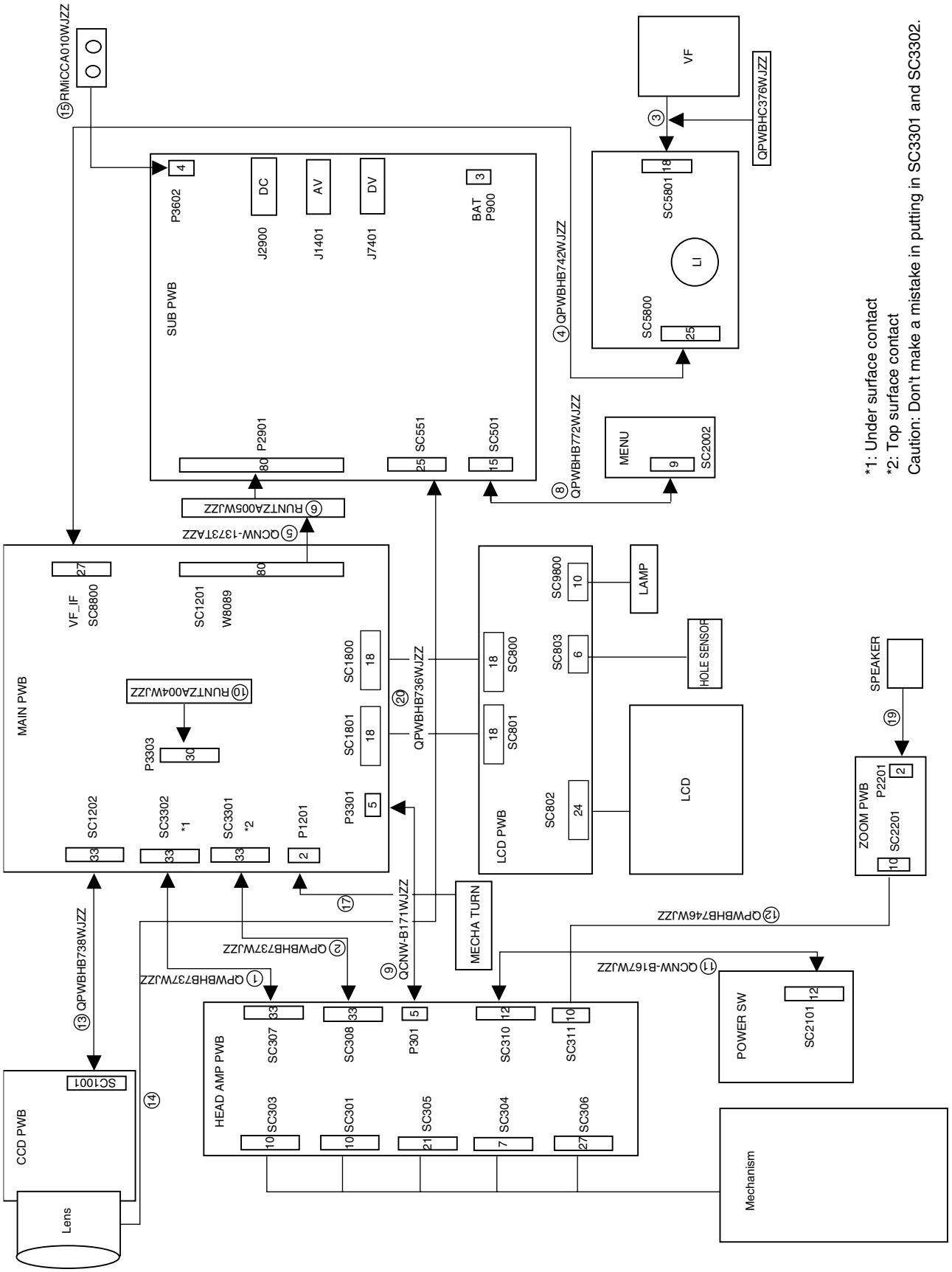
List of measuring jigs

· Color monitor TV · Digital voltmeter · DC power source · Audio generator (CR oscillator) · Frequency counter · AC adapter	· Stereo AV output cable (supplied) · Adjustment remote control (RRMCG0033TASA) · Signal generator (NTSC pattern generator LCG-401/ 401YC: Manufactured by Leader) · Oscilloscope	· Vector scope · Tape for recording · DC cable (supplied with AC adapter) · Extension wire of video section · Alignment tape 90ADDVC-TAPE (color bar)

VL-Z100S-S/H-S/E-S/Z300S-S/H-S/E-S Specifications of service jigs

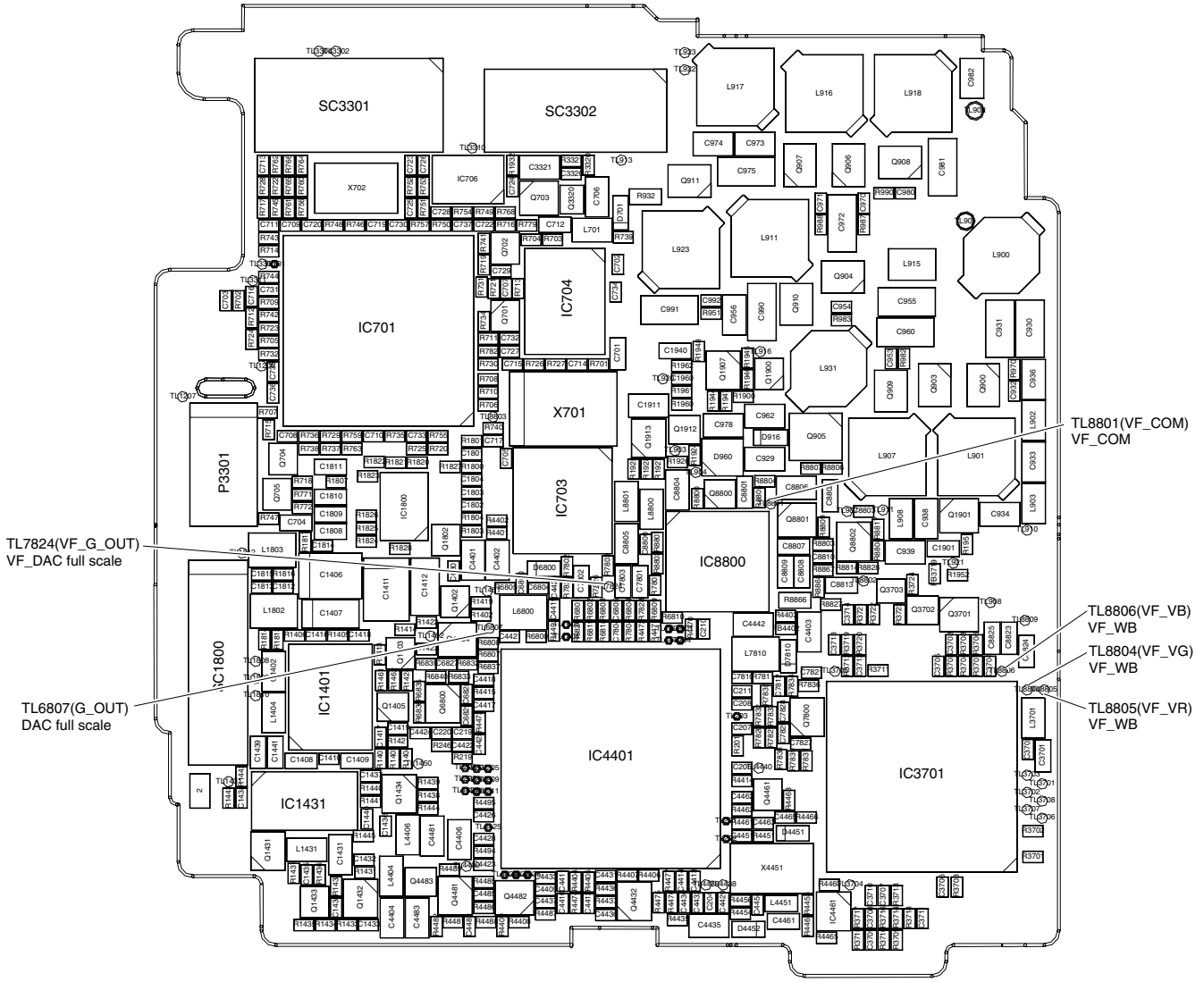
No.	Connection section	Connector REF. No.	No. of pins	New/ Cont.	Parts cord	Price code
1	H/A PWB — MAIN PWB①	SC307—SC3302	33P	C	QPWBHB737WJZZ	AN
2	H/A PWB — MAIN PWB②	SC308—SC3301	33P	C	QPWBHB737WJZZ	AN
3	V/F — LITHIUM PWB	SC5801	18P		QPWBHC376WJZZ Product used	AF
4	MAIN — LITHIUM PWB	SC8800—SC5800	27P-25P		QPWBHB742WJZZ Product FPC used	AE
5	MAIN — RUNTA005WJZZ	SC1201	80P	C	QCNW-1373TAZZ	BQ
6	RUNTZA005WJZZ — SUB	P2901	80P	C	RUNTZA005WJZZ	AX
8	Menu key — SUB	SC2002—SC501	9P-15P		QPWBHB772WJZZ Product FPC used	AE
9	H/A PWB — MAIN PWB	P301—P3301	5P		QCNW-B171WJZZ Product wire used	AF
10	TP jig for envelope checking	P3303	30B-B	C	RUNTZA004WJZZ	AW
11	Power supply	SC310—SC2101	12P		QCNW-B167WJZZ Product FFC used	AC
12	ZOOM	SC311—SC2201	10P	C	QPWBHB746WJZZ	AE
13	CCD PWB — MAIN	SC1001—SC1202	33P		QPWBHB738WJZZ Product FPC used	AD
14	Lens unit — SUB	SC551	25P		CLNS-A005HA50 Product unit used	CE
15	MIC — SUB	P3602	4P		RMiCCA010WJZZ Product unit used	AK
17	MECHA TURN — MAIN	P1201	2P		DUNTKC372PM00 Product unit used	AG
19	SPEAKER — ZOOM	P2201	2P		VSP0020P-B3WN Product unit used	AL
20	LCD UNIT — MAIN	SC1800/SC1801	18Px2		QPWBHB736WJZZ Product FPC used	AR

VL-Z100S-S/H-S/E-S/Z300S-S/H-S/E-S-S Service jig configuration

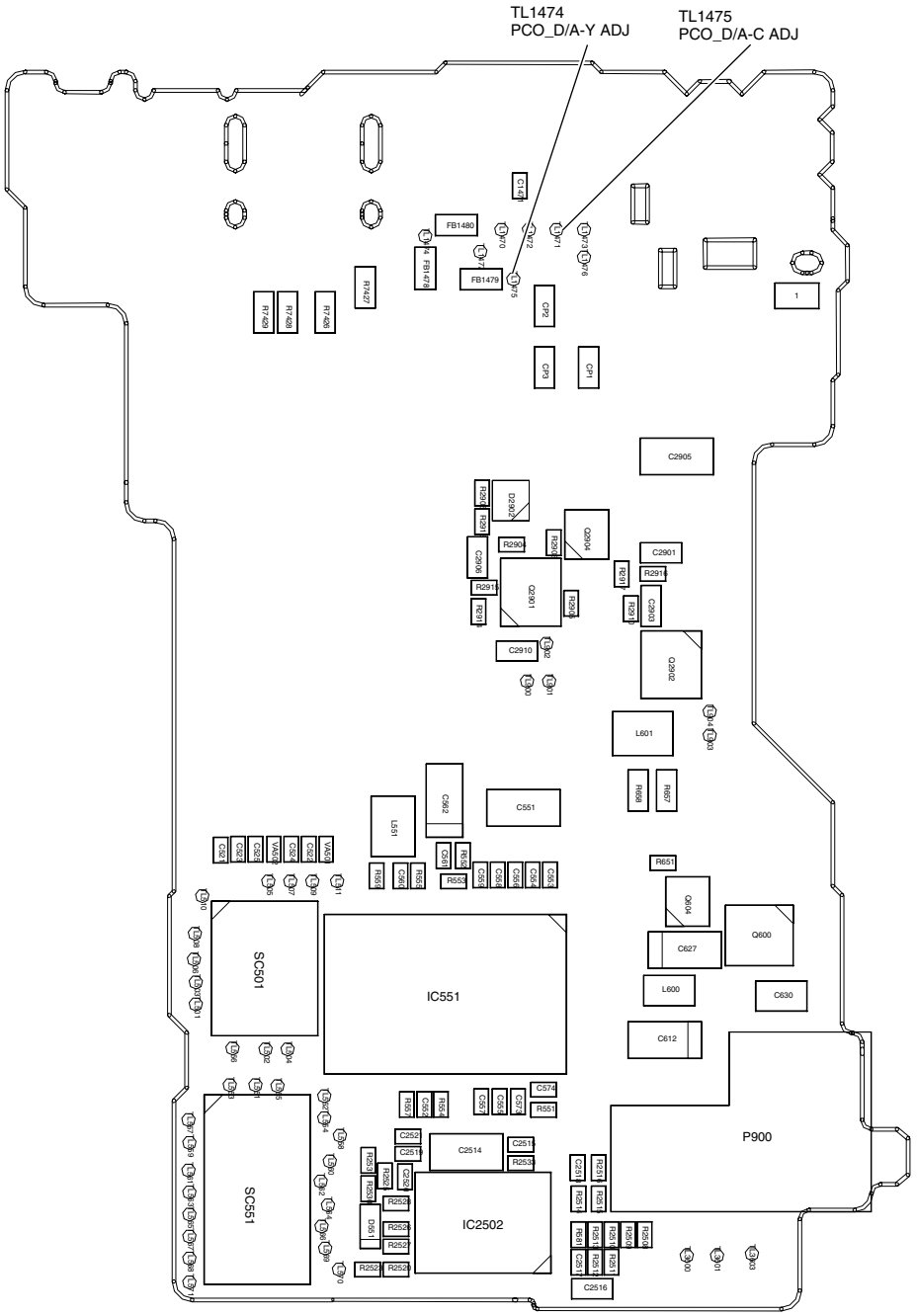


[TEST POINT]

(Wiring board diagram: Main Side A)



(Wiring board diagram: Sub Side A)



[Execution of adjustment]

Adjustment of servo and system controller

1. System code setting

It is necessary to set the following data items after replacing IC705 (E^2PROM).

<Adjusting method>

Select the VCR adjustment mode and set the data value at each address.

Code	Specifications		Destination		Specifications		Menu setting		Software switching		Calendar	
Address	01	09	02	0A	03	0B	04	0C	05	0D	07	0F
Z100S(SS)	A9	56	0A	F5	B6	49	00	FF	00	FF	04	FB
Z100S(RS)	A9	56	2A	D5	B6	49	00	FF	00	FF	04	FB
Z100E(ES/EW)	A9	56	0B	F4	BE	41	00	FF	00	FF	04	FB
Z100H(HS)	A9	56	0D	F2	BE	41	00	FF	00	FF	04	FB
Z300S(SS/AS)	A9	56	0A	F5	34	CB	00	FF	00	FF	04	FB
Z300S(RS)	A9	56	2A	D5	34	CB	00	FF	00	FF	04	FB
Z300E(ES/WS)	A9	56	0B	F4	3C	C3	00	FF	00	FF	04	FB
Z300H(HS)	A9	56	0D	F2	3C	C3	00	FF	00	FF	04	FB

Code	1394/exif model name											
Address	1A1	1A2	1A3	1A4	1A5	1A6	1A7	1A8	1A9	1BD	1BE	1BF
Z100S(SS)	56	4C	2D	5A	31	30	30	53	00	00	00	00
Z100S(RS)	56	4C	2D	5A	31	30	30	53	00	00	00	00
Z100E(ES/EW)	56	4C	2D	5A	31	30	30	45	00	00	00	00
Z100H(HS)	56	4C	2D	5A	31	30	30	48	00	00	00	00
Z300S(SS/AS)	56	4C	2D	5A	33	30	30	53	00	00	00	00
Z300S(RS)	56	4C	2D	5A	33	30	30	53	00	00	00	00
Z300E(ES/WS)	56	4C	2D	5A	33	30	30	45	00	00	00	00
Z300H(HS)	56	4C	2D	5A	33	30	30	48	00	00	00	00

• Automatic adjustment

Mode	VCR ADJ mode
Adjusting method	1) Using command 12, select the VCR adjustment mode. 2) Using command 20, enable writing to the E^2PROM. 3) Using command 22, set the above-shown system codes according to the model. 4) Using the command, inhibit writing to the E^2PROM. 5) Using the command, exit the VCR adjustment mode.
Examples	• Replacement of E^2PROM (IC705)

• Manual adjustment

Mode	VCR ADJ mode
Adjusting method	1) Set the CAM/OFF/VCR selector switch to VCR. 2) Press "CONTINUE" → "VCR adjustment" on the remote control to enter the VCR ADJ mode. (At this time, "VCR ADJ" is displayed in the lower left part.) Enter the specified value at each address. · Shown below is the procedure for setting. 3) Select an address by increasing or decreasing the flashing numeric value with the FF or REW key and press the PB key to confirm it. 4) Set the flashing numeric value to the specified value by increasing or decreasing it with the FF or REW key and press the PB key to confirm it. 5) Press the STOP key to make it possible to select an address. 6) Repeat steps (3), (4) and (5) above until all the data items are set. Then press "CONTINUE" to exit the VCR ADJ mode. 7) Set the CAM/OFF/VCR selector switch to OFF.
Examples	·Replacement of E^2PROM (IC705)

2. Adjustment of HSWP

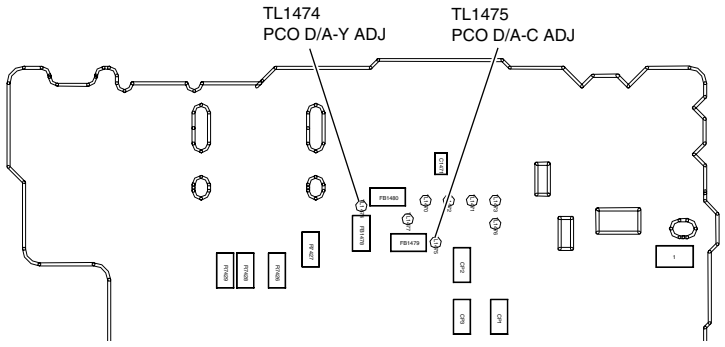
Mode	VCR ADJ mode
Adjusting method	1) Select the video mode and play back the alignment tape. 2) Press "CONTINUE" → "HSWP ADJ" keys on the remote control. → HSWP adjustment execution (When the adjustment is completed, "GOOD" is displayed on the LCD and ejecting is performed automatically.) If adjustment cannot be made, "NG" is displayed on the LCD.
Examples	· Replacement of mechanism · Replacement of E²PROM

3. Adjustment of shutdown

Mode	VCR ADJ mode
Adjusting method	1) Set a recordable tape and select the camera mode. 2) Press "CONTINUE" → "TEST SEL" on the adjustment remote control to enter the TEST mode (T-01 flashing). 3) Select T-03 with the FF and REW keys and press "PB" key. 4) Adjust the power supply voltage so that TL904(+) becomes 6.00V ± 50mV as viewed from TL900(-). 5) Press the "Display change" button on the main unit. Turn OFF the power.
Examples	· Replacement of microcomputer (IC701), Regulator (IC704) and E²PROM (IC705)

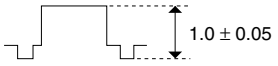
ADJUSTMENT OF VIDEO I/O CIRCUIT SYSTEM

(Wiring board diagram: Sub Side A)



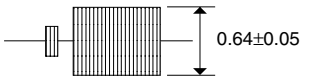
1. PCO D/A-Y adjustment

Measurement point	TL1474 (connected to oscilloscope)		
Address	VCR ADJ 566	Mode	EE mode
Procedure	1) Connect the AVS cable and then connect it to the monitor (TO). 2) Call the adjustment mode (V-ADJ). 3) Set the address to "566", and call the date. (100% white signal is output.) 4) Vary the date with the FF and REW keys to set the signal appearing at TL1474 to 1.0Vp-p ± 0.05Vp-p.		
Examples	• During IC705 replacement. • During IC4401 replacement. • During IC1401 replacement.		



2. PCO D/A-C adjustment

Test point	TL1475		
Address	VCR ADJ 567	Mode	EE mode
Procedure	1) Connect the AVS cable and then connect it to the monitor (TO). 2) Call the adjustment mode (V-ADJ). 3) Set the address to "567", and call the data. 4) Vary the data with the FF and REW keys to set the signal appearing at TL1475 to 0.64Vp-p ± 0.05Vp-p.		
Examples	• During IC705 replacement. • During IC4401 replacement. • During IC1401 replacement.		

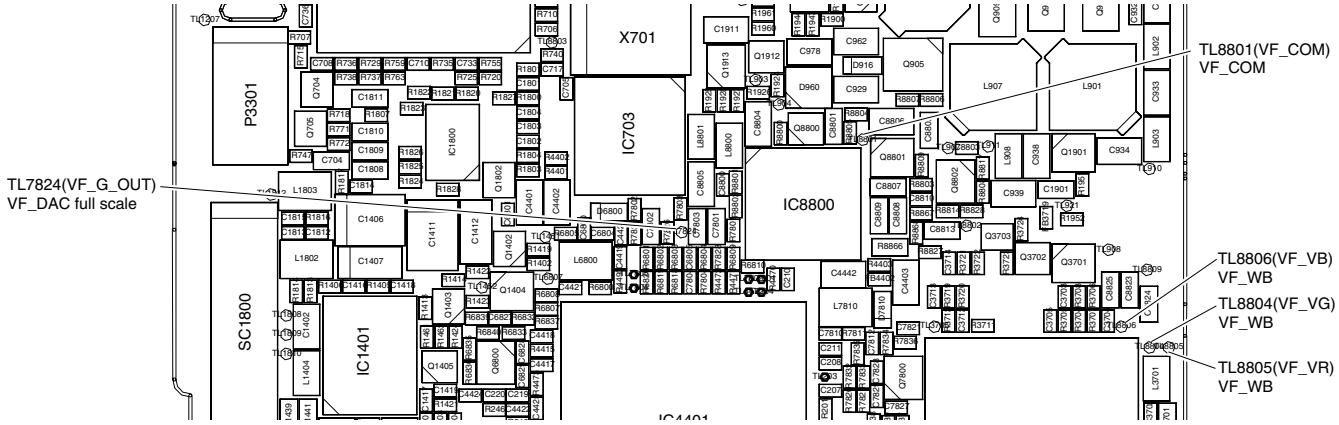


3. Check of electromagnetic conversion circuit system (Auto check of playback envelope signal quality and error rate)

Mode	VCR adjustment mode
Procedure	1) Insert a recordable tape and enter the VTR mode. 2) Press the "CONTINUE" → "TEST SEL" keys on the remote control for adjustment to enter the TEST mode. ("T-01" is displayed on the LCD.) 3) Select "T-0F" using the FF or REW key and press the PB key. 4) LP recording of the color bar/rewind/playback and playback envelope/error rate are inspected automatically. 5) The results are displayed about 50 seconds after the start. (1) ENV NG: Playback envelope signal amplitude or balance between channels is lower than standard. (2) SYNC NG: SYNC error rate is lower than standard. (3) ECC NG: ECC error rate is lower than standard. (4) CK-OK: No problem. * If one of the error inspections 1 to 3 is NG, the result is displayed and the test ends at that point. (Inspections following that are not executed.) 6) Turn off the main unit to exit.
Examples	• When replacing the mechanism. • When confirming a defect of the electromagnetic conversion system such as dirty video heads.

ADJUSTMENT OF VF CIRCUIT

(Wiring board diagram: Main Side A)



1. Setting data

Address	4AF	4B2	4C1	4C4	582	58C
Data	77	30	68	B0	48	90

2. Adjustment of VF_COM amplitude (Main PWB)

Measurement point	TL8801(VF_COM)	Address	VCR ADJ 32
Procedure	1) Set the data value at address 5EB (TESTSW2) to 77. 2) Connect the digital voltmeter to TL8801 (VF_COM). At address 32 (VF_DAC_C), adjust the DC voltage to the adjustment rating.		
Adjustment rating	3.5V ± 50mV		
Examples	· Replacement of IC705		

3. Adjustment of VF_DAC full scale (Main PWB)

Measurement point	TL7824(VF_G_OUT)	Address	VCR ADJ 59D
Procedure	1) Set the data values at addresses 587 (GRYLEV)/58C (γ PEAK)/5EB (TESTSW2) and 5E6 (OSDSW) to FF/80/77 and 00, respectively. (The LED shows nothing.) 2) Set the data values at addresses 59F (CLAMP)/58D (PEDESTAL) and 5B7 (VCLK3 INV) to 00/80 and 48, respectively. 3) Connect the digital voltmeter to TL7824 (VF_G_OUT) and measure the DC voltage. * The measured voltage is (DA_VF-G). 4) Set the data values at addresses 59F (CLAMP) and 58D (PEDESTAL) to 80 and 00, respectively. 5) At address 59D (VF_DAC_G), adjust the DC voltage to the adjustment rating. 6) Reset the data at addresses 587 (GRYLEV)/58C (γ PEAK)/58D (PEDESTAL)/59F (CLAMP)/5B7 (VCLK3 INV)/5E6 (OSDSW) and 5EB (TESTSW2) to their original values. (Initial values: 40/C5/38/28/90/28 and 7F)		
Adjustment rating	DA_VF-G +0.39V ± 10mV		
Examples	· Replacement of IC705, IC4401		

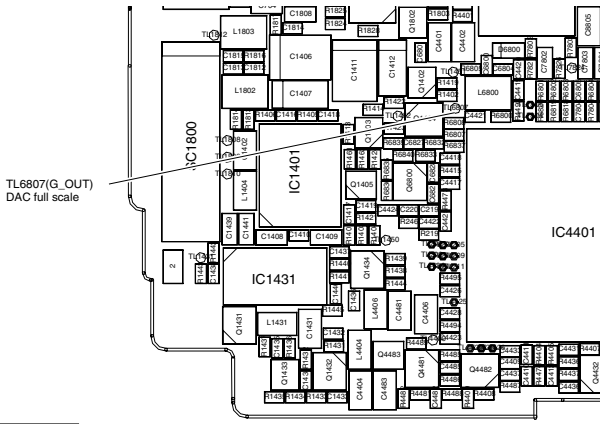
4. Adjustment of VF_WB (Main PWB)

Measurement point	TL8804(VF_VG), TL8805(VF_VR), TL8806(VF_VB)
Address	VCR ADJ 58E, 590
Procedure	1) Set the data values at addresses 587 (GRYLEV) and 5E6 (OSDSW) to 80 and 70, respectively. 2) Connect the oscilloscope to TL8804 (VF_VG) and TL8805 (VF_VR), and at address 58E (VF_WB-R), adjust the amplitude to the adjustment rating. 3) Connect the oscilloscope to TL8804 (VF_VG) and TL8806 (VF_VB), and at address 590 (VF_WB_B), adjust the amplitude to the adjustment rating.
Adjustment rating	0mV ± 40mV, 0.1mV ± 40mV
Examples	· Replacement of IC705, IC4401, IC8801

ADJUSTMENT OF LCD CIRCUIT

When making this adjustment, set the backlight switch to "Normal".

(Wiring board diagram: Main Side A)



1. Setting data

Address	027	08D	090
Data	94	50	30

The same adjusting procedure and connections as described for the VCR section are used.

2. Adjustment of DAC full scale (Main PWB)

Measurement point	TL6807(G_OUT)	Address	VCR ADJ 094(G)
Mode	VCR AV input		
Adjusting method	1) Set the data values at addresses 41E/086/41C and 410 to FF/80/77 and 00, respectively. (The LED shows nothing.) 2) Set the data values at addresses 096/411 and 0A8 to 00/80 and 58, respectively. 3) Connect the digital voltmeter to TL6807 (G_OUT) and measure the DC voltage. * The measured voltage is (DA_VG). 4) Set the data values at addresses 096 and 411 to 80 and 00, respectively. 5) At address 094, adjust the DC voltage to the adjustment rating. 6) Reset the data at addresses 41E/086/096/41C/411/0A8 and 410. (Initial value: 00/C5/28/7F/28/52 and 7D)		
Adjustment rating	DA_VG + 0.31V ± 10mV		
Examples	· Replacement of IC705, IC4401		

3. Adjustment of COM-Bias (with the unit settings complete)

Measurement point	LCD panel display surface	Address	VCR ADJ 025
Mode	VCR AV input		
Adjusting method	1) Apply a 40% white signal to the AV input. 2) Set the illuminometer (TOPCON IM-3) on the LCD panel surface. (Cut off outside light.) 3) Minimize the ripple of the output waveform of the illuminometer.		
Adjustment rating	Minimum value Response time: 0.6 sec		
Remarks	Make adjustment after five minutes or more of aging.		
Examples	· Replacement of LCD panel		

4. Adjustment of W/B (with the unit settings complete)

Measurement point	LCD panel display surface	Address	VCR ADJ 41F, VCR ADJ 421
Mode	VCR AV input		
Adjusting method	1) Apply a 40% white signal to the AV input. 2) Apply a 40% white signal to the standard monitor. Make adjustment so that the image on the LCD becomes equivalent to the image on the standard monitor.		
Adjustment rating	Standard monitor		
Remarks	Make adjustment after five minutes or more of aging.		
Examples	· Replacement of LCD panel · Replacement of IC4401, IC705, IC1800		

Setting of MODEL ID

<table>
<tr><td>Address</td><td colspan="3">VCR ADJ FD, FE, FF</td></tr>
<tr><td>Mode</td><td>VCR mode</td><td>Setting rating</td><td>10, 20</td></tr>
<tr><td>Setting method</td><td colspan="3">1) Using command 12, select the VCR adjustment mode.
2) Using command 20, enable writing to the E²PROM.
3) Set MODEL ID at each address.
<table>
<tr><td>Address</td><td>FDh</td><td>FEh</td><td colspan="2">FFh</td></tr>
<tr><td>Date</td><td>10h</td><td>20h</td><td>Z100S</td><td>81</td></tr>
<tr><td colspan="3" rowspan="5"></td><td>Z100E</td><td>83</td></tr>
<tr><td>Z100H</td><td>82</td></tr>
<tr><td>Z300S</td><td>7D</td></tr>
<tr><td>Z300E</td><td>7F</td></tr>
<tr><td>Z300H</td><td>7E</td></tr>
</table>
</td></tr>
<tr><td>Examples</td><td colspan="3">Replacement of E²PROM (IC705)</td></tr>
</table>

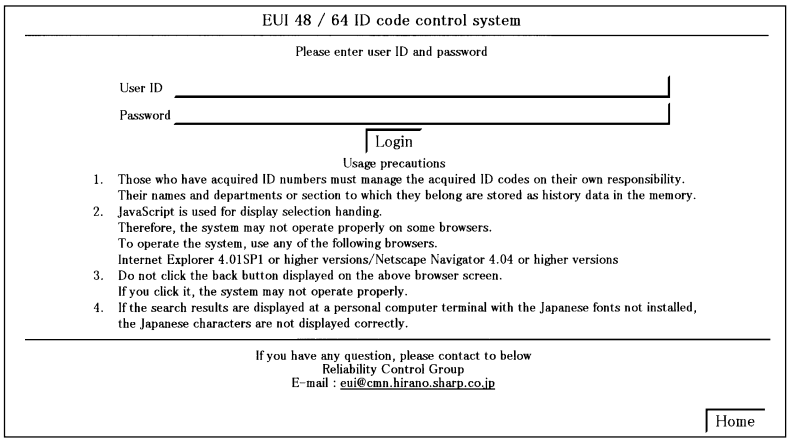
DV INTERFACE (IEEE1394) ID SETTING

This unit has a DV interface function conforming to IEEE1394. Each unit therefore must have its own ID number. Because this ID is written into the E²PROM (IC705) in the main PWB, it is necessary to newly write the ID newly when this IC is replaced.

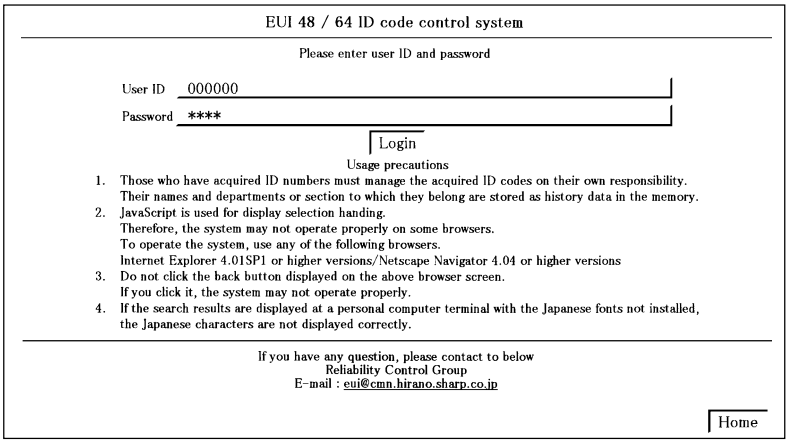
Address	180, 17F, 17E	Mode	VCR
Setting rating	ID number obtained from the URL below		
Setting method	1) Refer to the ID code application below. 2) Place the data acquired in step (1) at the corresponding address in the VCR mode. * Download an ID number and write it on the main unit according to the notice from the AV System Group "Issue No.S8-001".		
Examples	• Replacement of E²PROM (IC705 in main PWB)		

■ ID code application

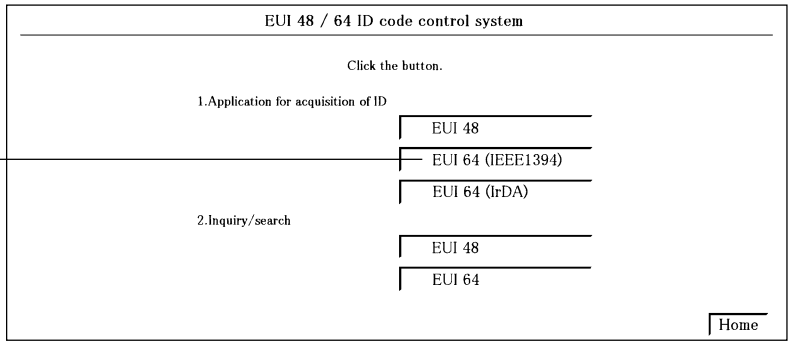
1. Connect with the EUI48/64 ID code control system.
   (1) Start the Internet Explorer or Netscape Navigator.
   (2) Access the following address.(URL: http://www.rcg.osa.sharp.co.jp/home/default-E.asp)
   Select "EUI48/64 ID code control system" among the "Service" items.
   Note: If you want to establish a connection by directly inputting the URL, please input the following.
   URL:http://www1.rcg.osa.sharp.co.jp:7000/adrs_agt/adrs_dba/ide00010.main
   The login screen will appear.


EUI 48 / 64 ID code control system
Please enter user ID and password
User ID
Password
Login
Usage precautions
1. Those who have acquired ID numbers must manage the acquired ID codes on their own responsibility.
Their names and departments or section to which they belong are stored as history data in the memory.
2. JavaScript is used for display selection handing.
Therefore, the system may not operate properly on some browsers.
To operate the system, use any of the following browsers.
Internet Explorer 4.01SP1 or higher versions/Netscape Navigator 4.04 or higher versions
3. Do not click the back button displayed on the above browser screen.
If you click it, the system may not operate properly.
4. If the search results are displayed at a personal computer terminal with the Japanese fonts not installed,
the Japanese characters are not displayed correctly.
If you have any question, please contact to below
Reliability Control Group
E-mail : eui@cmn.hirano.sharp.co.jp
Home

(3) Input the [User ID] and [Password]. Click on [Login].

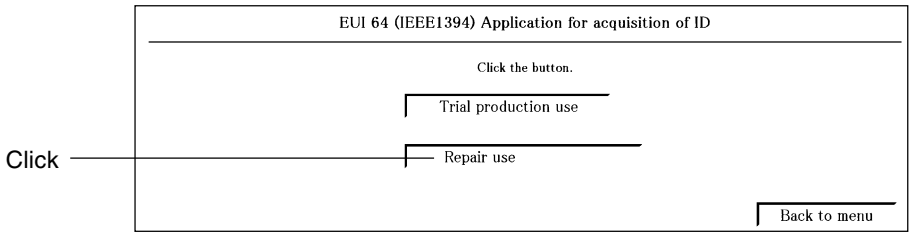

EUI 48 / 64 ID code control system
Please enter user ID and password
User ID 000000
Password ****
Login
Usage precautions
1. Those who have acquired ID numbers must manage the acquired ID codes on their own responsibility.
Their names and departments or section to which they belong are stored as history data in the memory.
2. JavaScript is used for display selection handing.
Therefore, the system may not operate properly on some browsers.
To operate the system, use any of the following browsers.
Internet Explorer 4.01SP1 or higher versions/Netscape Navigator 4.04 or higher versions
3. Do not click the back button displayed on the above browser screen.
If you click it, the system may not operate properly.
4. If the search results are displayed at a personal computer terminal with the Japanese fonts not installed,
the Japanese characters are not displayed correctly.
If you have any question, please contact to below
Reliability Control Group
E-mail : eui@cmn.hirano.sharp.co.jp
Home

(4) Click on [EUI 64 (IEEE1394)] from
[1. Application of acquisition of application for ID].

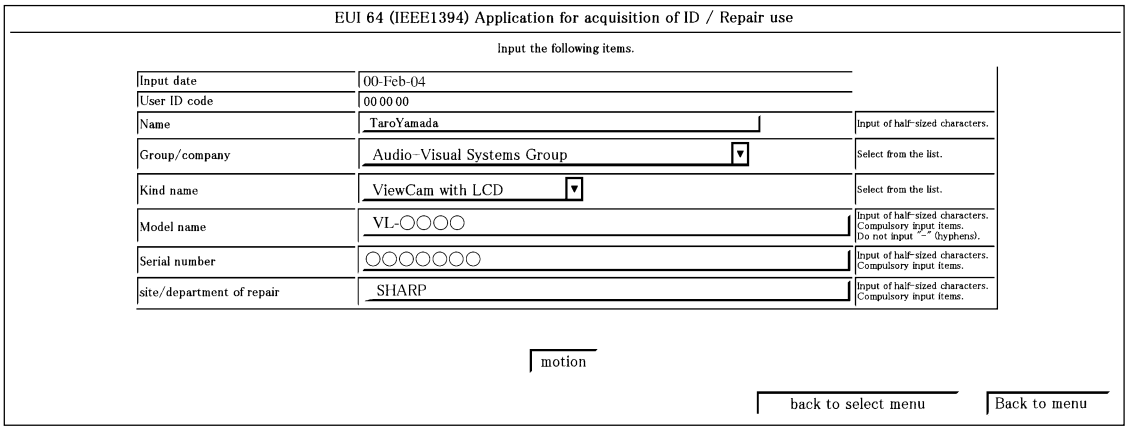


Click

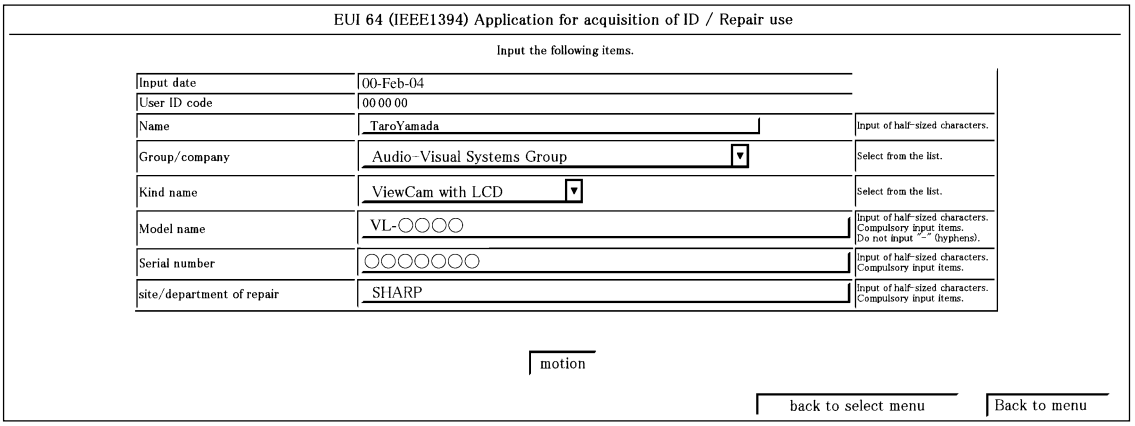
(5) Click on [Repair use].



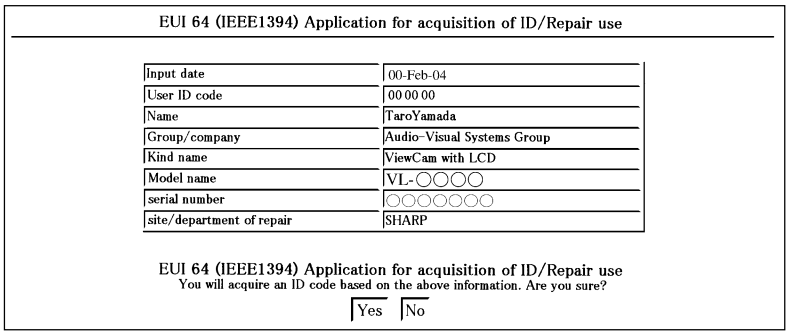
(6) Input the necessary information for the application.
Be sure to input the necessary input items.
Select the [Group/company] and [Kind name] from the list.
Input the [Model name] in half-size characters.
Input the [Serial number] in half-size characters.
Input the [Site/department] of repair in full-size characters.



(7) Click on [Motion].
The confirmation screen will appear.



(8) Click on [Yes].



2. Print the application result.
(1) Print out the application result screen.
Control the application result as evidence.
To print it out, select "Print (P) "under "File (F)" on the menu bar or click on the print button on the tool bar.
(2) Click on [Menu] to complete the application.
If you make application in succession, repeat steps (1) to (8).
To end it, click on [End] on the menu screen.

9-2. Adjustment of camera section

9-2-1. Servicing of camera section

(1) Camera adjustment should be performed with the set completed.

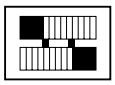
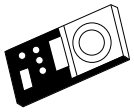
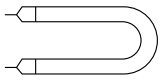
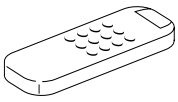
(2) Subjects, measuring instruments and jigs necessary for servicing and adjustment of the camera section

• Gray scale chart • Color bar chart • Oscilloscope • Digital voltmeter • Halogen lamp: 2 pcs. • Vector scope	• Frequency counter • Illumination meter • Color temperature meter • Color temperature conversion filter HOYA "LB-165" • Color video monitor	• Video output cable • AC adapter • Extension cables • Adjustment remote control

9-2-2. List of camera jigs

Sketch

<Note: Order of descriptions> 1. Jig name 2. Part code 3. Code

 1. Gray scale chart (390 x 520 mm) 2. JiGCHART-1 3. CP	 1. Color bar chart (240 x 320 mm) 2. JiGCHART-4 3. DA	 1. Illuminometer (0 to 3000 lx) 2. JiGMETER-1 3. CT	 1. Color temperature meter (1600 to 40000 degrees K) 2. JiGMETER-2 3. EL
1. Color temperature conversion filter (3200 degrees K ⇒ 6800 degrees K) 2. JiGHOYA-LB165 3. BN	 1. PC plate connector drawer 2. JiGTH-SS10 3. AW	 1. Adjustment remote control 2. RRMCG0033TASA 3. BT	

9-2-3. Adjustment of camera section

(1) Preparations and checking before adjustment

1) Adjust the lighting so that the illumination intensity is about 3000 lx and that uniform illumination is provided on the whole pattern. (It is desirable that two or more lamps be used as light sources.) Set the color temperature at 3200K.
2) The test pattern used should be free from stains and color deterioration.
3) If a failure occurs in the electric circuit, be sure to locate the fault using a measuring instrument and perform repairing or replacement before making adjustment of camera section.

(2) Adjustment remote control RRMCG0033TASA

The adjustment remote control (RRMCG0033TASA) is used to adjust the camera section of this unit. Adjustment is made by writing data into the E^2PROM(IC705) at particular addresses using the remote control via the microcomputer.

1) To adjust the camera

Press the "CONTINUE" key and then press the "CAM ADJ" key.
The following display will appear on the LCD screen, allowing you to make adjustment.

CAM ADJ
□ □ □ □

2) Description of display

CAM □ □ □ □ (Address value) ADJ □ □ □ □ (Data value)

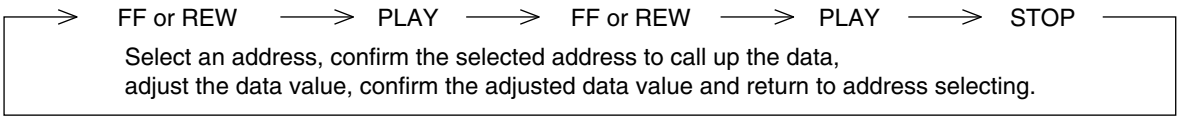
(It means camera adjustment.)

* This unit has addresses 0000 to 13FF.
* Byte data (last two digits valid) and 2-byte data (last three digits valid) are available.

3) Description of remote control keys

"FF" key: It is used to increase the address value and data value.
"REW" key: It is used to decrease the address value and data value.
"PLAY" key: It is used to confirm the selected address to call up the data. It is also used to confirm the data value.
"STOP" key: It is used to clear the data and make it possible to select an address.

4) Operation flow


FF or REW
PLAY
FF or REW
PLAY
STOP
Select an address, confirm the selected address to call up the data,
adjust the data value, confirm the adjusted data value and return to address selecting.

5) After completion of adjustment

Press the "CONTINUE" key to make the display "CAM ADJ" disappear.

Note: Before pressing the "CONTINUE" key, check that the unit is not in the auto focus adjustment mode or the camera signal system adjustment mode (described later).

● Camera section adjustment mode

The auto focus adjustment mode and the camera signal system adjustment mode are used for adjustment of the camera section.

Note: The adjustment data are stored in the E^2PROM (IC705-on MAIN unit) as shown below. When making changes, it is therefore necessary to perform rewriting of data and checking of the latest data.

In addition, the data value needs to be adjusted in the following situations (Change it before the adjustment.)Refer to page 40:

- When the lens is replaced
- When the CCD is replaced
- When the E^2PROM is replaced
- When the CCD board, Lens and MAIN board are replaced

(3) Auto focus adjustment mode

· The camera of this unit features automatic focussing by means of a microcomputer.
The auto focus circuit of this unit performs focusing operation based on the principle that the high frequency component in the video signal increases as focus is achieved. In addition, in order to achieve a large magnification with a small-size lens, the inner focus system is employed in which a master lens (rear lens) is moved forward and backward for focusing. This inner focus system enables full range focussing with a focal length range of 10 mm to infinite distance. However, because the maximum allowable distance from the closest subject to the tele end is 1.5 m, a subject less than 1.5 m away from the tele end cannot be focused on if it is shot at the tele end. In such cases, zooming-out is performed automatically for focusing.

The major factors of the auto focus system are as follows:

- Detection of master lens position
- Detection of iris position
- Detection of zoom lens reference position

These detection data are stored in the E^2PROM.

1) How to enter the auto focus adjustment mode

Set the data value at address "13FE" to " ▯▯ 01".

⇩

The screen will be white-faded temporarily and the auto focus adjustment mode will be established.

* When the auto focus adjustment mode is established, make adjustment according to "(5) Camera adjusting procedure".
* In the auto focus adjustment mode, lens operation cannot be performed.

2) How to enter the normal mode

Set the data value at address "13FE" to " ▯▯ FF".

⇩

The screen will be white-faded temporarily and the normal mode will be established.

⇩

Pressing the "CONTINUE" key will make the display "CAM ADJ" disappear and make it possible to perform normal operation.

(4) Camera signal system adjustment mode

In the camera signal system adjustment mode, the auto white balance function is stopped in order to adjust the camera. In this mode, the white balance is set to the indoor mode and focussing is performed manually.

1) How to enter the camera signal system adjustment mode

Set the data value at address "0000" to "□□ 00".

⇩

The camera signal system adjustment mode will be established.

*When the camera signal system adjustment mode is established, make adjustment according to "(5) Camera adjusting procedure".

2) How to enter the normal mode

Set the data value at address "0000" to "□□ FF".

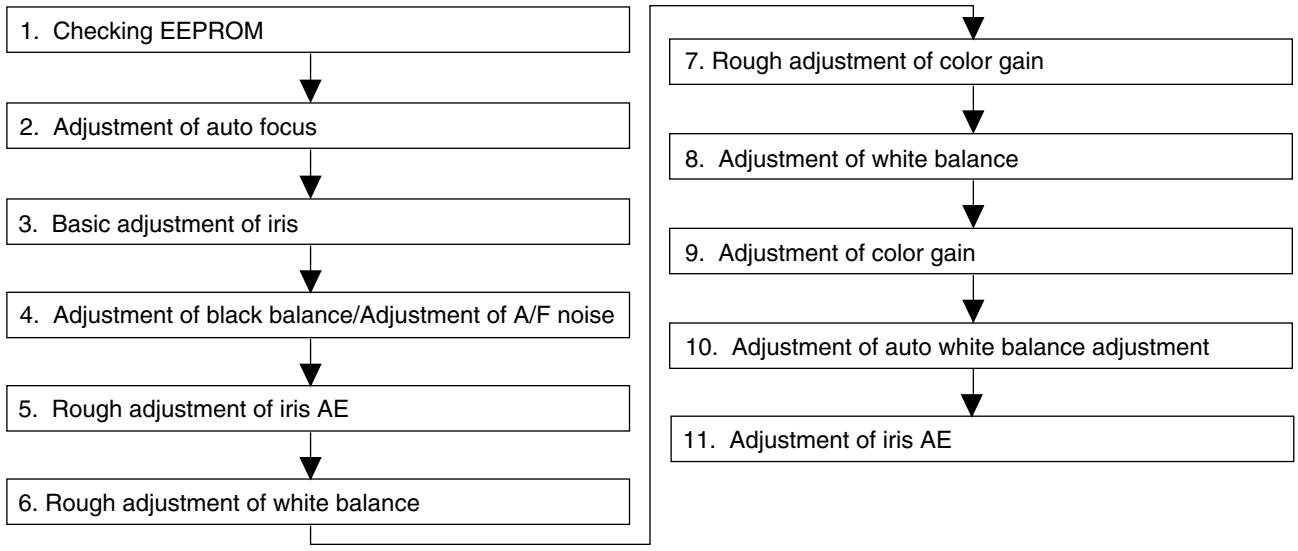
⇩

The normal mode will be established.

⇩

Pressing "CONTINUE" key will make the display "CAM ADJ" disappear and make it possible to perform normal operation.

(5) Camera adjusting procedure


1. Checking EEPROM
2. Adjustment of auto focus
3. Basic adjustment of iris
4. Adjustment of black balance/Adjustment of A/F noise
5. Rough adjustment of iris AE
6. Rough adjustment of white balance
7. Rough adjustment of color gain
8. Adjustment of white balance
9. Adjustment of color gain
10. Adjustment of auto white balance adjustment
11. Adjustment of iris AE

* "1. Adjustment of auto focus" is performed in the auto focus adjustment mode. The other adjustments are performed in the camera signal system adjustment mode.

9-2-4. Adjusting procedure

(1) Checking EEPROM

Before making adjustments, check that data values are written for the corresponding addresses as shown below.
If not, write the data.

When performing (1) replacement of EEPROM or (2) replacement of main board, make sure to write the following data.

ADR	DATA
0094	03
0095	FF
0096	03
0097	FF
01E0	03
01E1	FF
01E2	03
01E3	FF
01E4	03
01E5	FF
01E6	03
01E7	FF
01E8	03
01E9	FF
01EA	03
01EB	FF
022C	01
022D	32
022E	01
022F	32
0268	FF
0269	F5
026C	00
026D	00
02B0	02
02B3	08
02B4	02
02BB	08
02C0	38
02C1	EC
02C2	C8
02C3	B4
02C4	9A
02C5	8A
02C6	76
02C7	5A
02C8	46
02C9	3B
02CA	30
02CB	23
02CC	13
02CD	0C
02CE	05
02D0	38

ADR	DATA
02D1	EC
02D2	C8
02D3	B4
02D4	9A
02D5	8A
02D6	76
02D7	5A
02D8	46
02D9	3B
02DA	30
02DB	23
02DC	13
02DD	0C
02DE	05
0313	14
0318	08
031B	12
031C	00
034D	42
035E	38
035F	EC
0360	C8
0361	B4
0362	9A
0363	8A
0364	76
0365	5A
0366	46
0367	3B
0368	2E
0369	1F
036A	11
036B	09
036C	04
036D	01
036F	38
0370	EC
0371	C8
0372	B4
0373	9A
0374	8A
0375	76
0376	5A
0377	46

ADR	DATA
0378	3B
0379	2E
037A	1F
037B	11
037C	09
037D	04
037E	01
0404	22
0405	44
0492	40
0493	A8
0494	C8
0497	00
0498	F8
04A1	57
04A2	33
04A3	33
04AB	38
04AC	EC
04AD	C8
04AE	B4
04AF	9A
04B0	8A
04B1	7A
04B2	66
04B3	57
04B4	4C
04B5	3F
04B6	2C
04B7	19
04B8	0F
04B9	06
04BB	38
04BC	EC
04BD	C8
04BE	B4
04BF	9A
04C0	8A
04C1	7A
04C2	66
04C3	57
04C4	4C
04C5	3F
04C6	2C

ADR	DATA
04C7	19
04C8	0F
04C9	06
0525	00
052D	F0
053E	16
053F	14
0548	44
054F	E0
0553	20
0555	F6
0557	DB
0558	DC
0559	F4
055A	08
055B	04
055D	C8
055E	F8
055F	00
0560	D8
0561	29
0562	00
057A	FE
05A0	28
05A1	90
05A3	28
05A5	C0
05A6	E8
05A8	B0
05AB	FE
05CC	00
05CE	D8
05D8	18
05E6	08
05E8	08
05E9	18
05EB	90
05EC	30
05ED	30
05F1	0A
05F5	90
05F6	E0
05F7	A0
05F9	40

ADR	DATA
05FA	14
05FB	10
0603	40
0604	98
0605	A8
0606	00
060F	C0
061A	2A
061C	24
061D	12
0632	11
063D	14
0645	16
0646	10
0647	14
0648	12
064D	14
064F	14
0650	10
0697	00
0699	00
069A	F0
074D	02

Item	Adjustment method

(2) Adjustment of auto focus

The following adjustments are performed automatically by establishing the auto focus adjustment mode and writing the following data at address "13FD" sequentially. The adjustment items are as shown in the table below. When an adjustment is completed normally, data "FF" is written, which should be confirmed before proceeding to the next adjustment.

Address	Data	Adjustment item
13FD	0012	Adjustment of wide end
	0008	Adjustment of tele end focus ∞ position
	0006	Adjustment of wide end focus ∞ position
	000D	Adjustment of zoom tracking

Note 1: During the adjustment of ∞ position, a subject should be shot actually. Make this adjustment while shooting a subject with a clear-cut outline. In the case of the adjustment of tele end focus ∞ position in particular, if it is performed without shooting a distant subject actually, the ∞ position will not be adjusted properly.
Adjustment of wide end focus ∞ position: 3 m or more
Adjustment of tele end focus ∞ position: 50 m or more

Note 2: In the case of the adjustment of ∞ position, the depth of field is important in insuring accuracy. If the depth of field is deep, the ∞ position may be adjusted improperly the subject hardly falls out of focus. Make this adjustment with the depth of field being shallow (the iris opened).

It is possible to open the iris using the high-speed shutter.

1. Establish the normal mode.
2. Call the V-V adjust sports mode in normal operation. (Refer to the instruction manual.)
3. Display "CAM ADJ" by using the remote control for servicing.
4. Establish the auto focus adjustment mode.
5. Perform the adjustment of ∞ position.
6. After the completion of the adjustment of ∞ position, set the V-V adjust back to the off position.

After canceling the auto focus adjustment mode (to write the data " FF" in the address "13FE"), set to the adjustment mode while in the camera signal system adjustment mode (to write the data " 00" in the address "0000").

(3) Basic adjustment of iris

It is performed to adjust the operating point of the hall element installed in the iris meter.

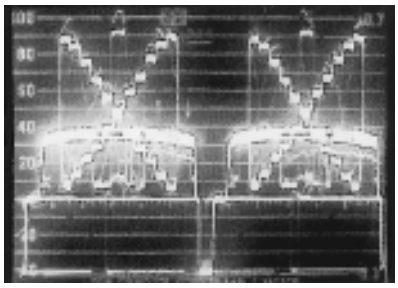
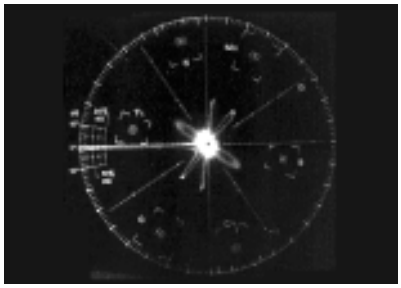
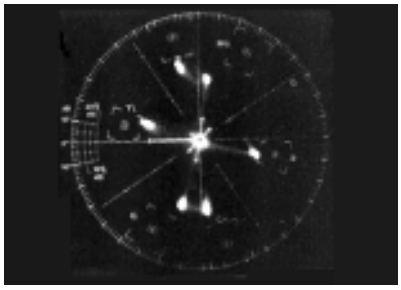
The following adjustments are performed automatically by writing the following data at address "13FD" sequentially in the camera signal system adjustment mode. The adjustment items are as shown in the table below. When an adjustment is completed normally, data "00FF" is written automatically.

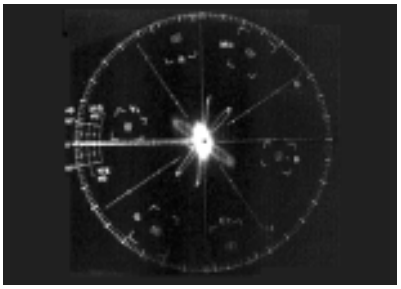
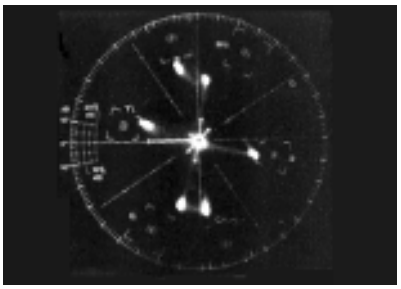
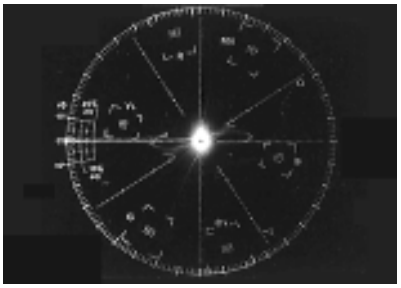
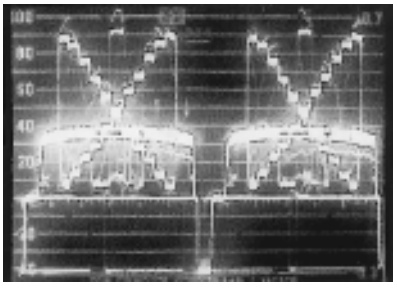
Address	Data	Adjustment item
13FD	0009	Adjustment of hall offset
	000A	Adjustment of iris offset
	000B	Adjustment of iris close

(4) Adjustment of black balance/Adjustment of A/F noise

This adjustment is performed automatically by writing data " 01" at address "0001". When the adjustment is completed normally, data "00FF" is written automatically.

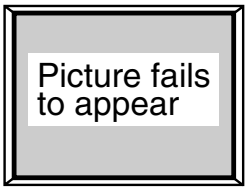
Address	Data	Adjustment item
0001	01	Black balance / A/F noise in the tape mode

Item	Adjustment method
(5) Rough adjustment of iris AE • Measurement terminal: S terminal luminance signal output (75 Ω termination) • Address: "0002" AE_CVT • Measuring instrument: Oscilloscope (horizontal cycle) • Object: Grey scale • Data changing range: "0000" to "00FE"	1) While shooting the gray scale normally, observe the video output using the oscilloscope. By rewriting the data at address "0002", adjust the white luminance signal level to 680±10mVp-p and the gray luminance signal level (on the gray scale background) to 330±10mVp-p.  100mV/div
(6) Rough adjustment of white balance • Measurement terminal: EE output • Address: "0090" CGAIN_KR_W "0092" CGAIN_KB_W • Measuring instrument: Vector scope • Object: Grey scale • Data changing range: "0000" to "03FF"	1) While shooting the gray scale normally, observe the monitoring screen of the vector scope. By rewriting the data at addresses "0090" and "0092", position the luminescent spot so that the following burst ratio is obtained. R-Y 0 ± 5% B-Y 0 ± 5% 
(7) Rough adjustment of color gain • Measurement terminal: EE output • Address: "0333" B-phase "0334" Ye-phase "0335" R-phase "0338" R-Gain "033A" B-Gain "033B" Ye-Gain • Measuring instrument: Vector scope • Object: Color bar chart • Data changing range: "0000" to "00FF"	1) Shoot the color bar chart and adjust the field angle so that the white level becomes 600mV. While observing the monitoring screen of the vector scope, rewrite the data at addresses "0333", "0334", "0335", "0338", "033A" and "033B" so that the red, blue and yellow luminescent spots are positioned as shown below. (As for the burst gain, gain setting of the vector scope should be made at the 75% Amplitude point on the B-Y axis.)  Adjustment address Red amplitude 1.75 ± 0.1 time (burst ratio) : "0338" Blue amplitude 1.35 ± 0.1 time (burst ratio) : "033A" Yellow amplitude 1.25 ± 0.1 time (burst ratio) : "033B" Red phase 103° ± 2° : "0335" Blue phase 358° ± 2° : "0333" Yellow phase 168° ± 2° : "0334"

Item	Adjustment method
(8) Adjustment of white balance • Measurement terminal: EE output • Address: "0090" INDOOR_W/B R "0092" INDOOR_W/B R • Measuring instrument: Vector scope • Object: Grey scale • Data changing range: "0000" to "03FF"	1) Perform the adjustment of white balance repeatedly. 
(9) Adjustment of color gain • Measurement terminal: EE output • Address: "0333" B-phase "0334" Ye-phase "0335" R-phase "0338" R-Gain "033A" B-Gain "033B" Ye-Gain • Measuring instrument: Vector scope • Object: Waveform monitor color bar chart • Data changing range: "0000" to "00FF"	1) Perform the color gain adjustment repeatedly.  Adjustment address Red amplitude 1.75 ± 0.05 time (burst ratio) : "0338" Blue amplitude 1.35 ± 0.05 time (burst ratio) : "033A" Yellow amplitude 1.25 ± 0.05 time (burst ratio) : "033B" Red phase 106° ± 1° : "0335" Blue phase 358° ± 2° : "0333" Yellow phase 168° ± 2° : "0334"
(10) Adjustment of auto white balance adjustment • Measurement terminal: EE output • Address: "0016" OUTDOOR R "0018" OURDOOR B • Measuring instrument: Vector scope • Object: Grey scale • Data changing range: "0000" to "03FF"	1) Set the color temperature conversion filter (LB165) on the lens. 2) While shooting the gray scale normally, observe the monitoring screen of the vector scope. By rewriting the data, position the luminescent spot so that the following burst ratio is obtained. R-Y 0 ± 5% (burst ratio) B-Y 0 ± 5% (burst ratio) 
(11) Adjustment of iris AE • Measurement terminal: S terminal luminance signal output (75 Ω termination) • Address: "0002" AE_CVT • Measuring instrument: Oscilloscope (horizontal cycle) • Object: Grey scale • Data changing range: "0000" to "00FE"	1) Establish the normal mode (by writing data " FF" at address "0000". 2) While shooting the gray scale normally, observe the video output using the oscilloscope. Check that the white luminance signal level is 640±10mVp-p and that the gray luminance signal level (on the gray scale background) to 290±10mVp-p.  100mV/div

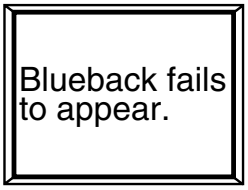
10. USEFUL TIPS (PROBLEMS DIFFER FROM THOSE FOUND ON VHS OR 8MM DECKS BECAUSE THE SIGNALS ARE DIGITALLY PROCESSED.)

Camera (EE mode)



Major circuits to be checked
- CCD
- Camera circuits (CDS/ADC, CAM ENGINE)
- MECHA/SYSTEM MiCON (IC701)
- VIDEO I/O (IC1401)
- CAM VIO ENGINE (IC4401)

VCR (EE mode)

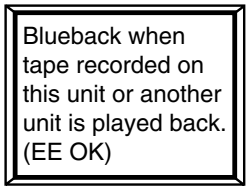


Major circuits to be checked
- MECHA/SYSTEM MiCON (IC701)
- CAM VIO ENGINE (IC4401)
- REC/PB ENGINE (IC452)

Camera (REC mode)
VCR (PB mode)

Major circuits to be checked
- CAM VIO ENGINE (IC4401)
- REC/PB ENGINE (IC452)

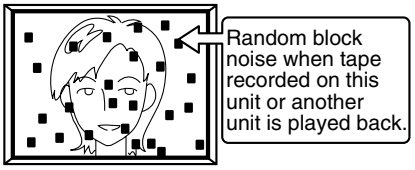
Camera (REC mode)
VCR (PB mode)



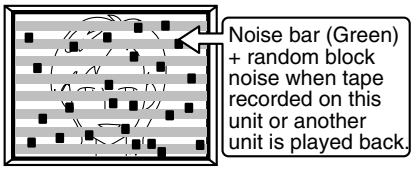
Major circuits to be checked
- EQ/PLL (IC3401)
- Head amplifier (IC301)

* Dirty or defective video head

Camera (REC mode)
VCR (PB mode)



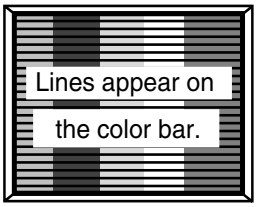
or



Major circuits to be checked
- EQ/PLL (IC3401)
- Head amplifier (IC301)

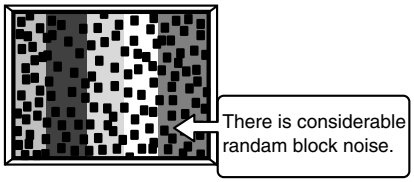
* Dirty or defective video head

VCR (PB mode) + color bar



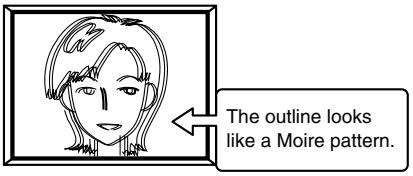
Major circuits to be checked
- CAM VIO ENGINE (IC4401)

VCR (PB mode) + color bar



Major circuits to be checked
- Adjustment of the electromagnetic conversion circuit system.

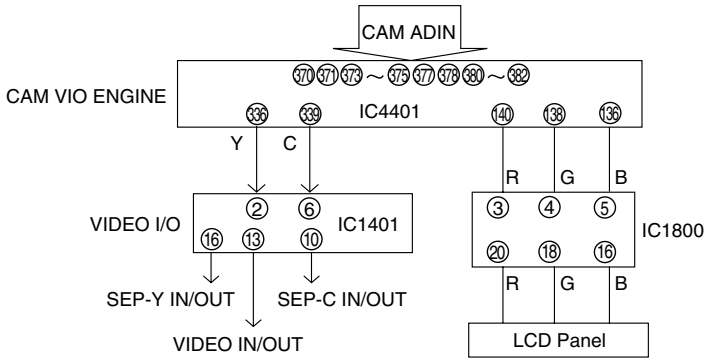
Camera (EE mode)



Major circuits to be checked
- CAM VIO ENGINE (IC4401)

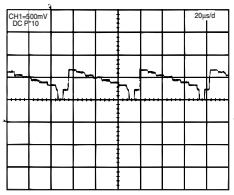
11. SIGNAL FLOW DIAGRAMS

11-1. EE MODE FLOW (VIDEO)

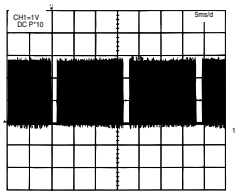


WAVEFORM DIAGRAM (DURING COLOR BAR RECORDING)

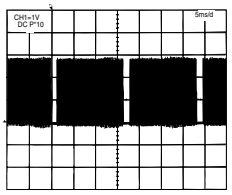
IC4401 336pin Y Output



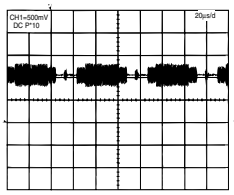
IC4401 254pin CDY3 Output



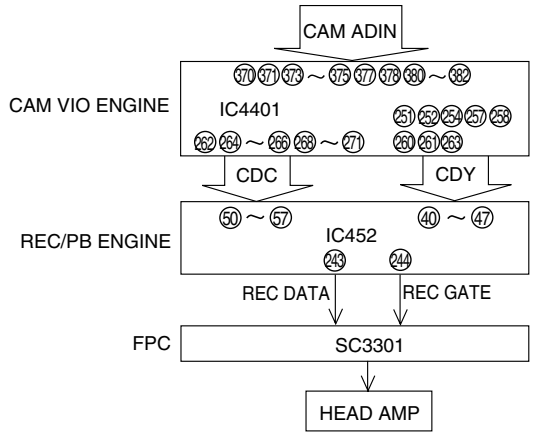
IC4401 262pin CDC3 Output



IC4401 339pin C Output

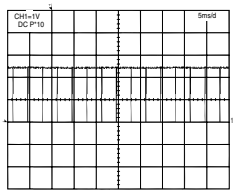


11-2. FLOW IN REC MODE (VIDEO)

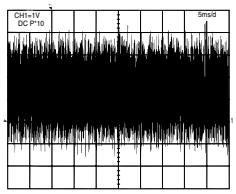


WAVEFORM DIAGRAM (DURING COLOR BAR RECORDING)

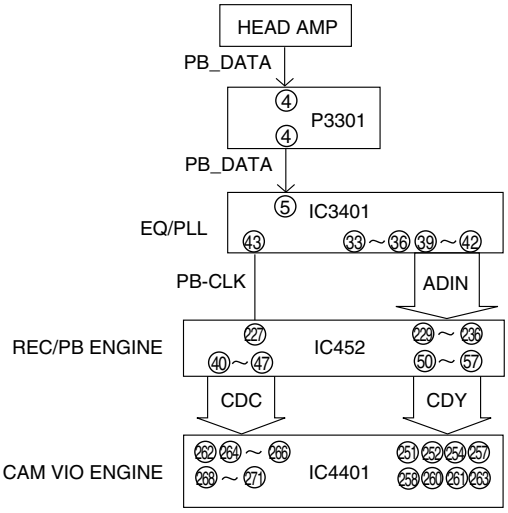
IC452 244pin Rec GATE Output



IC452 243pin Rec DATA Output

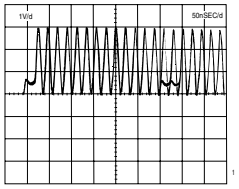


11-3. FLOW IN PB MODE (VIDEO)



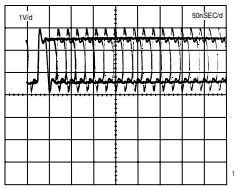
WAVEFORM DIAGRAM (DURING COLOR BAR PLAYBACK)

IC3401 5pin PBDATA Input

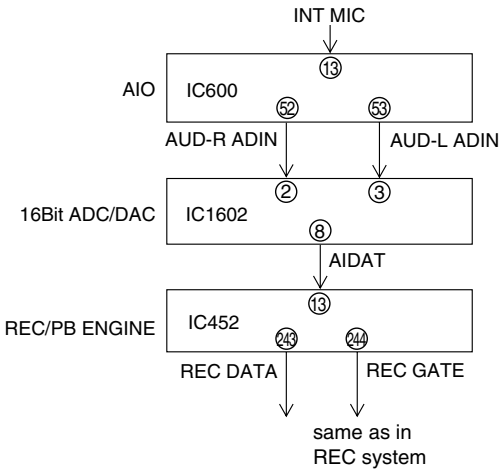


IC3401 43pin Input

IC3401 33~36, 39~42pin Output

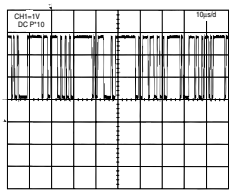


11-4. FLOW IN REC MODE (AUDIO)

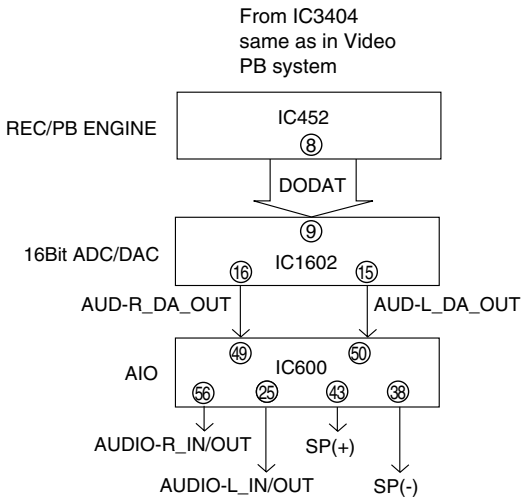


WAVEFORM DIAGRAM (1.6 kHz SINE WAVE)

IC1602 ⑧ Output

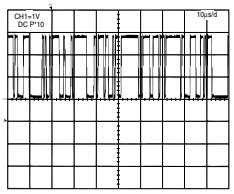


11-5. FLOW IN PB MODE (AUDIO)



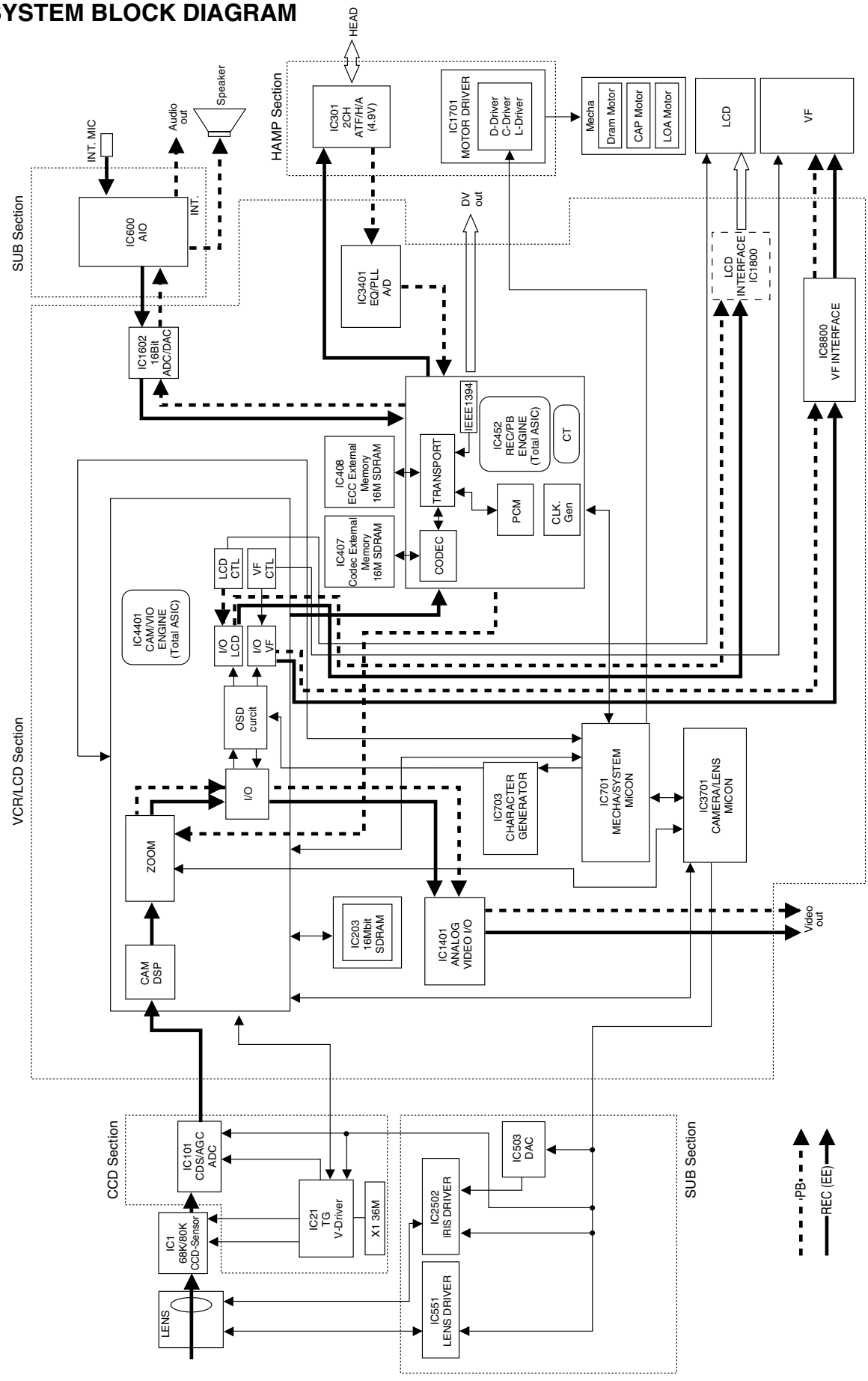
WAVEFORM DIAGRAM (1.6 kHz SINE WAVE)

IC1602 ⑨ DODAT Input

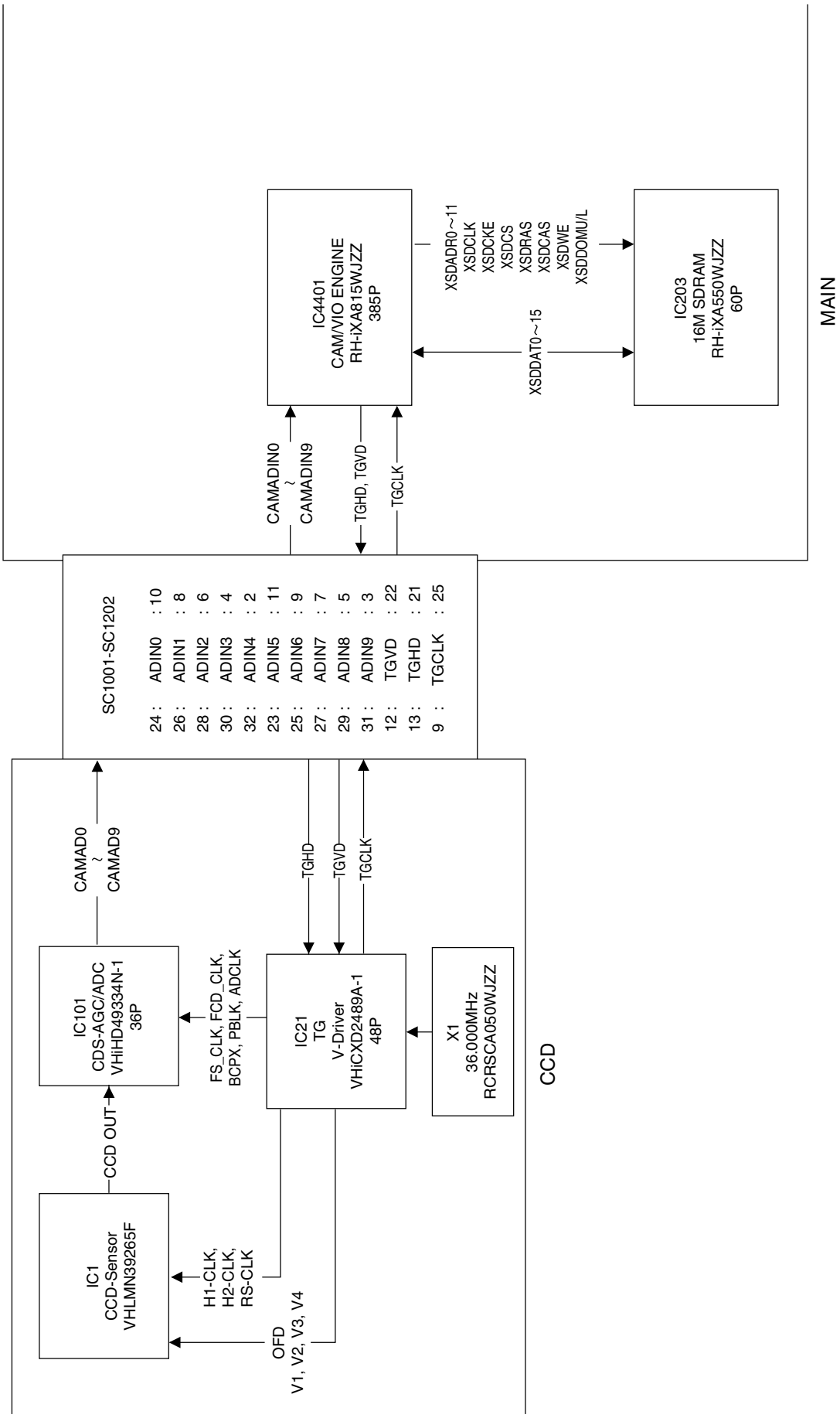


12. BLOCK DIAGRAMS

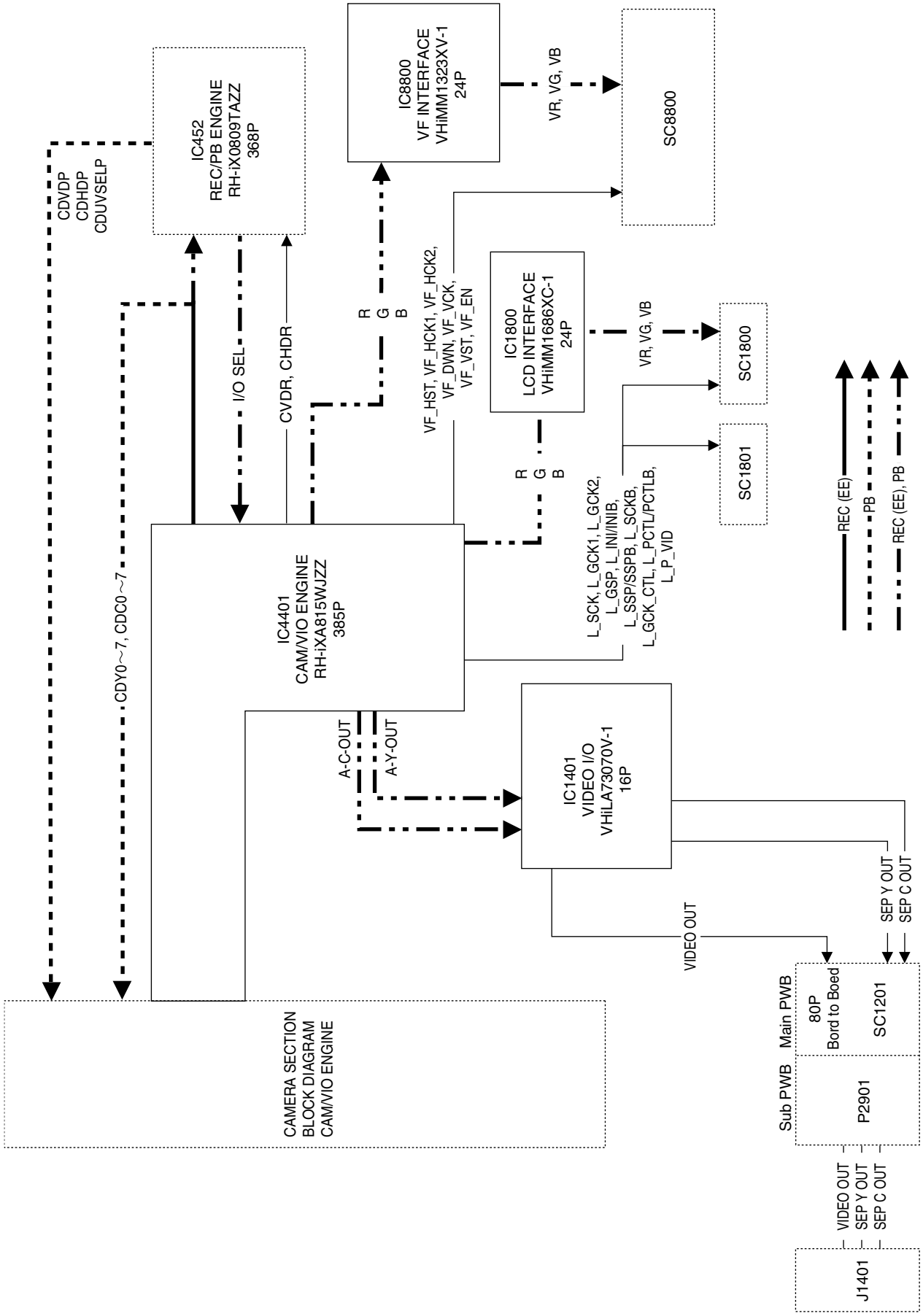
12-1. SYSTEM BLOCK DIAGRAM



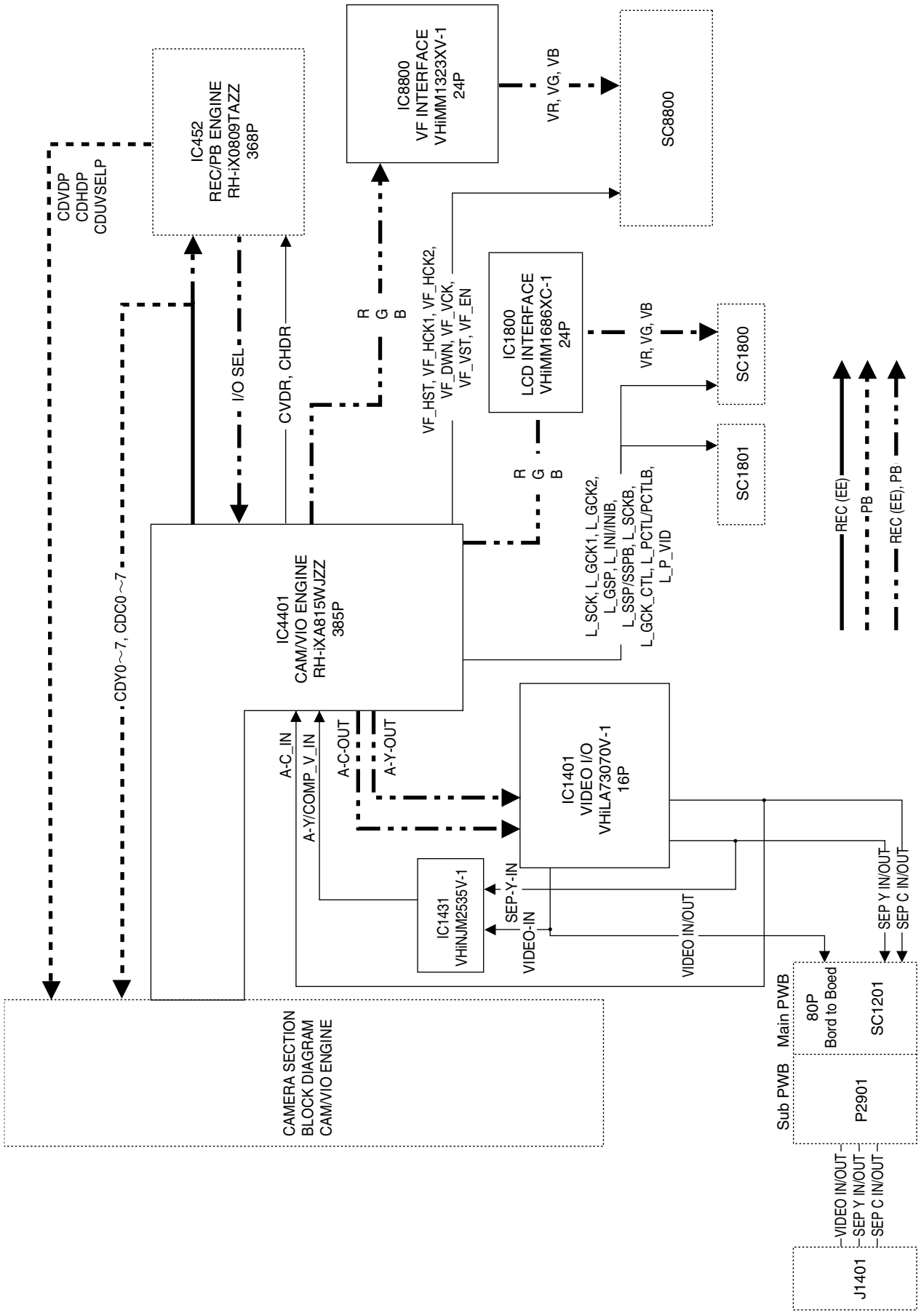
12-2. CAMERA SECTION BLOCK DIAGRAM



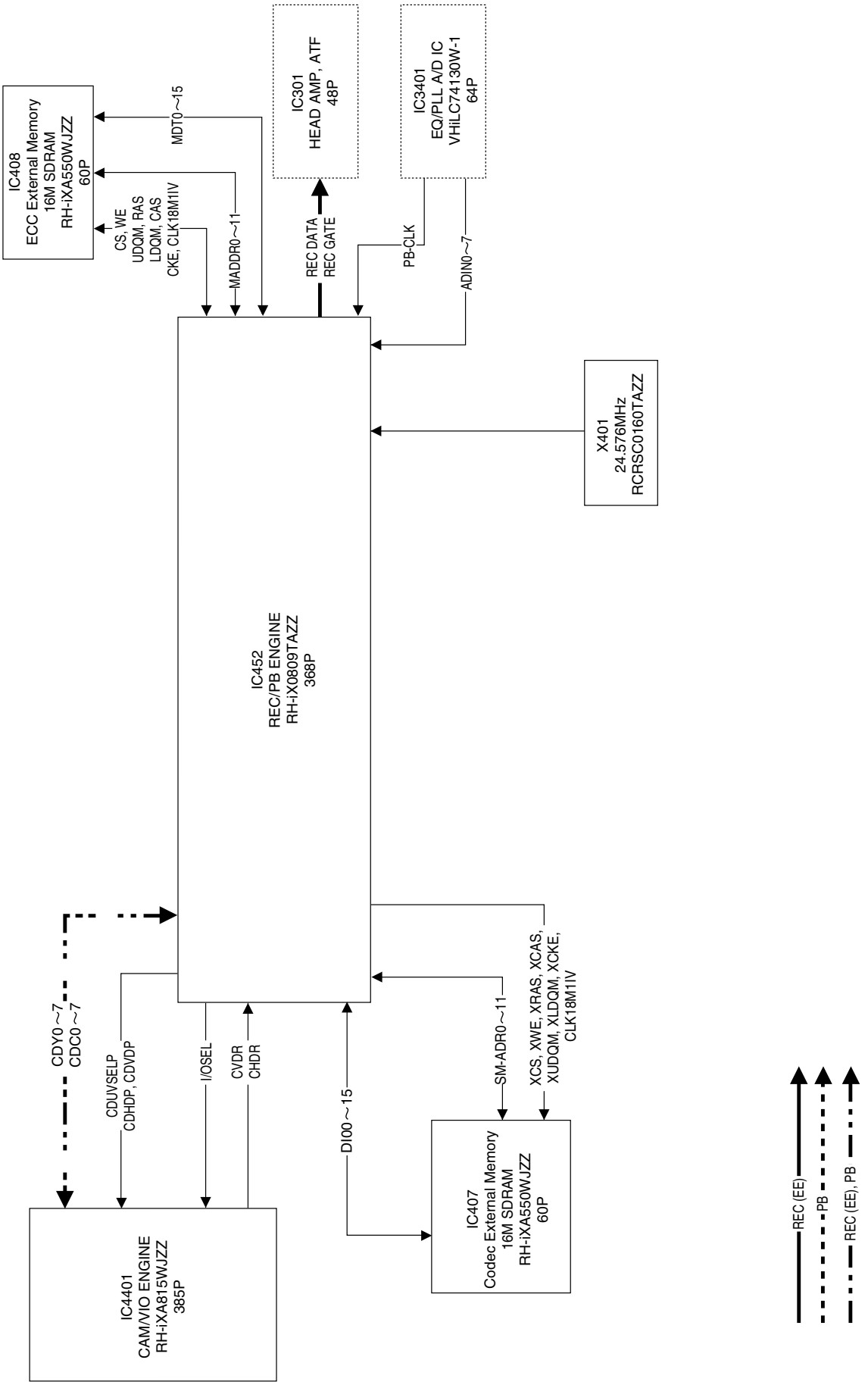
12-3. VIO ENGINE SECTION BLOCK DIAGRAM (VL-Z100)



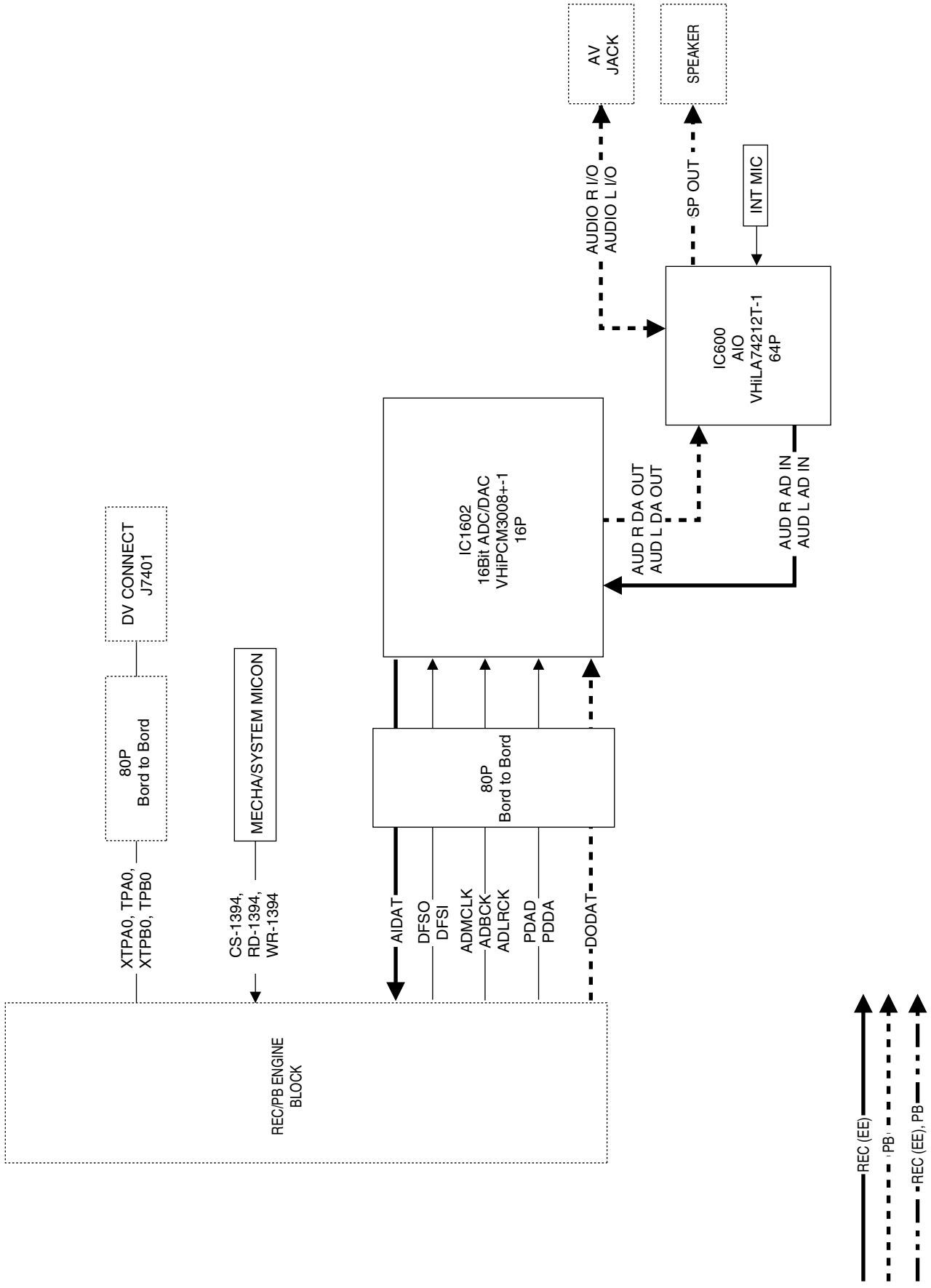
12-3. VIO ENGINE SECTION BLOCK DIAGRAM (VL-Z300)



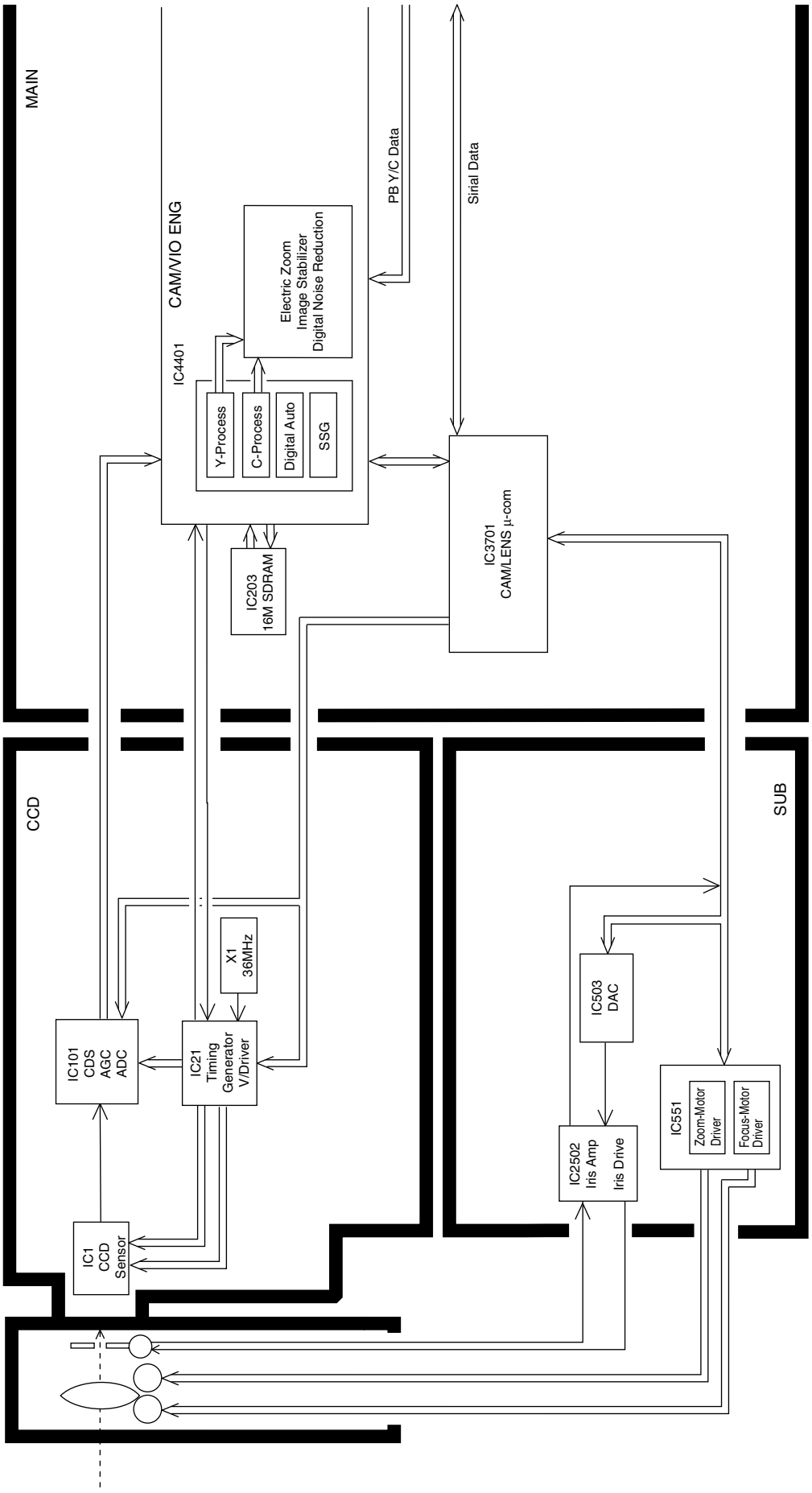
12-4. REC/PB SECTION BLOCK DIAGRAM



12-5. AUDIO/DIGITAL OUTPUT SECTION BLOCK DIAGRAM



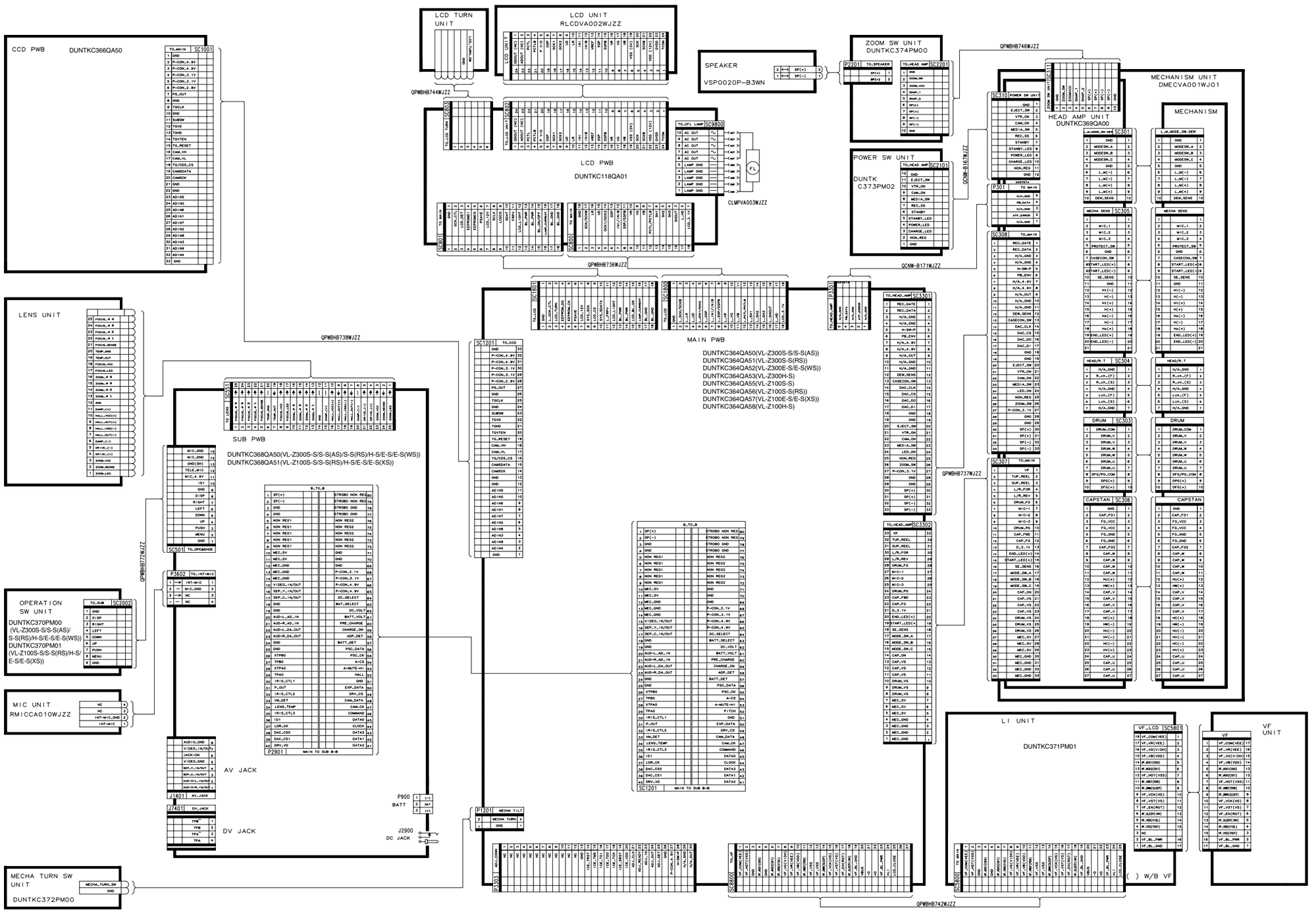
12-6. CAMERA CIRCUIT BLOCK DIAGRAM



- M E M O -

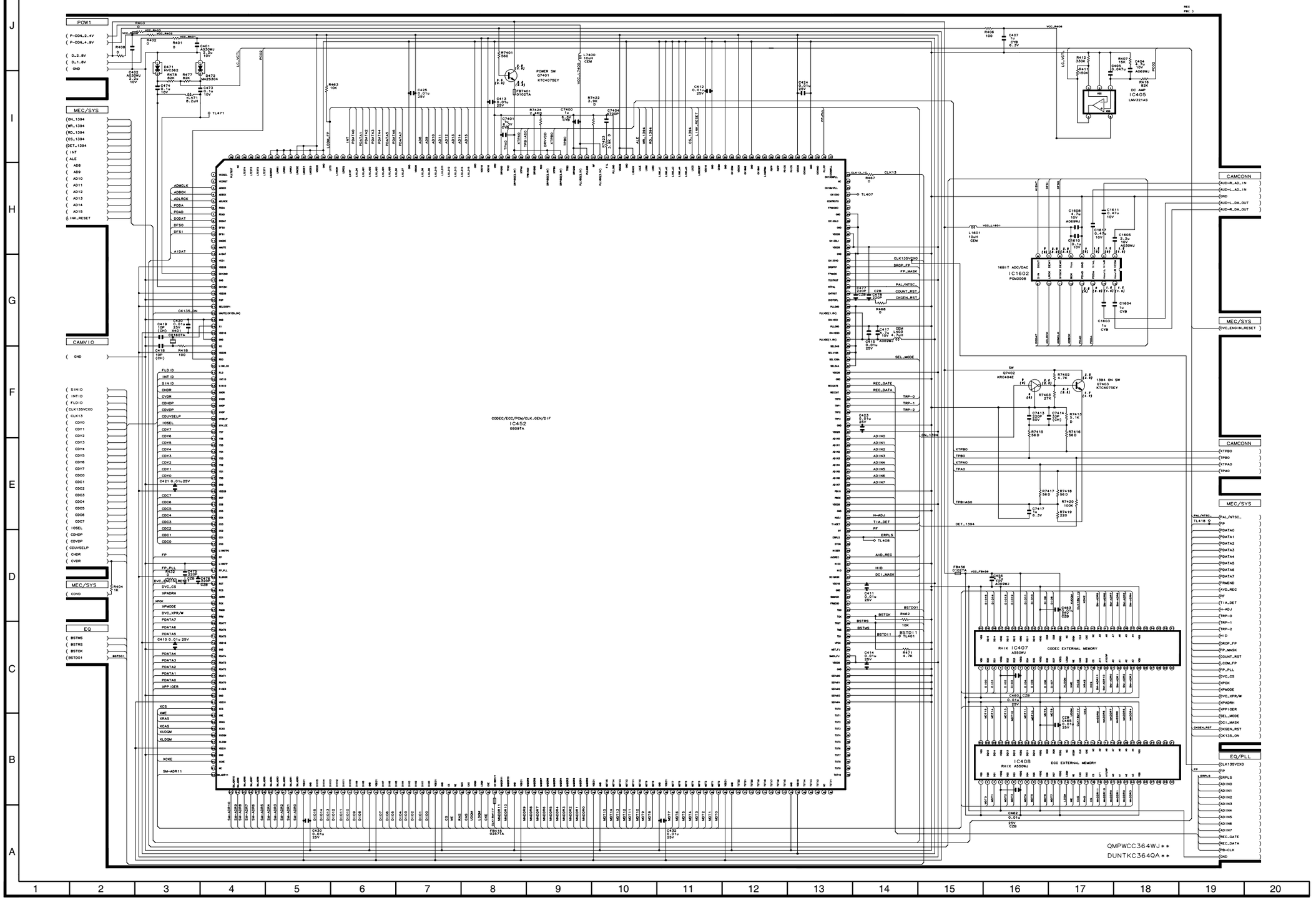
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13. SCHEMATIC DIAGRAMS 13-1. OVERALL SCHEMATIC DIAGRAM



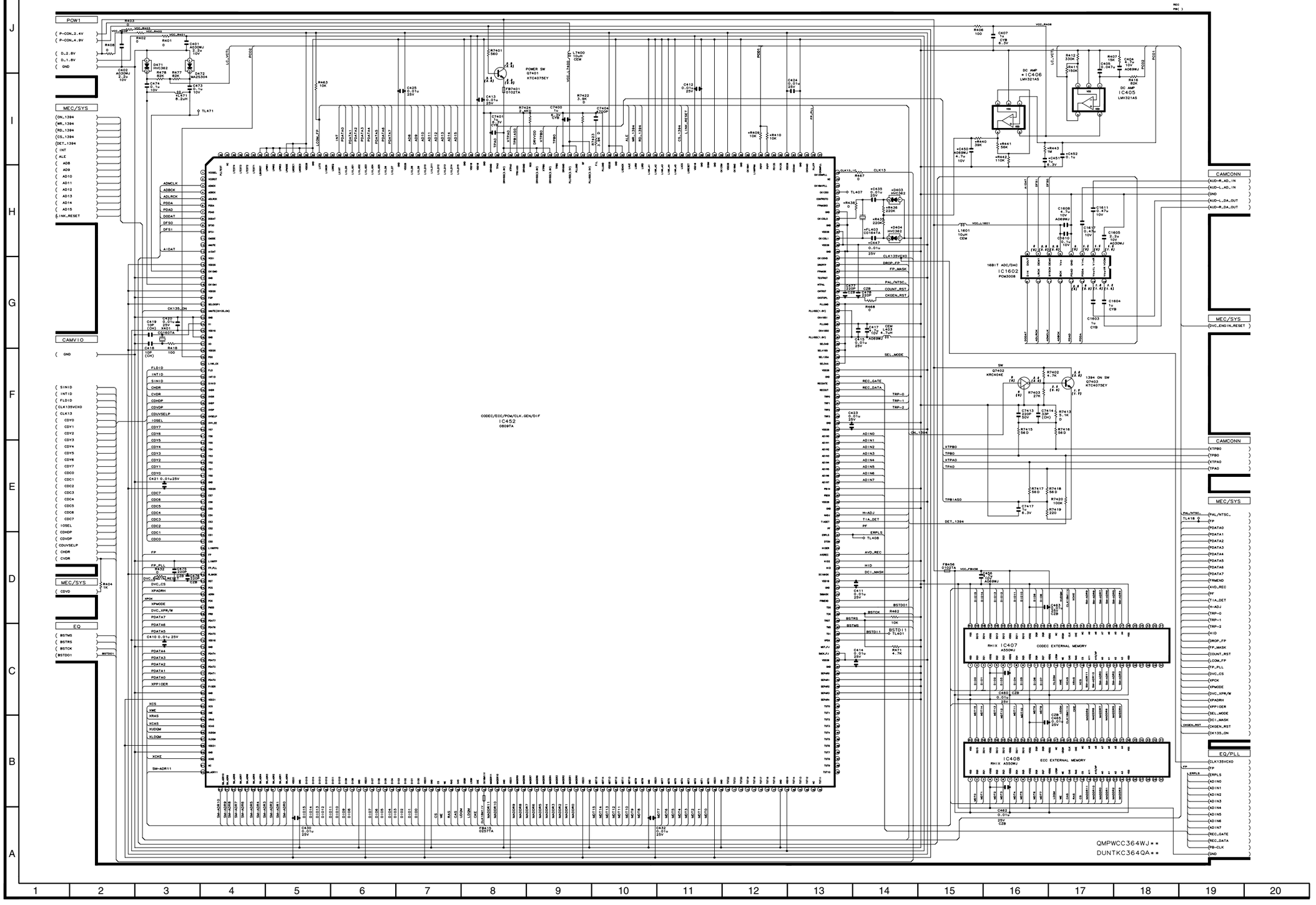
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-2. REC/PB ENGINE SCHEMATIC DIAGRAM (VL-Z100)



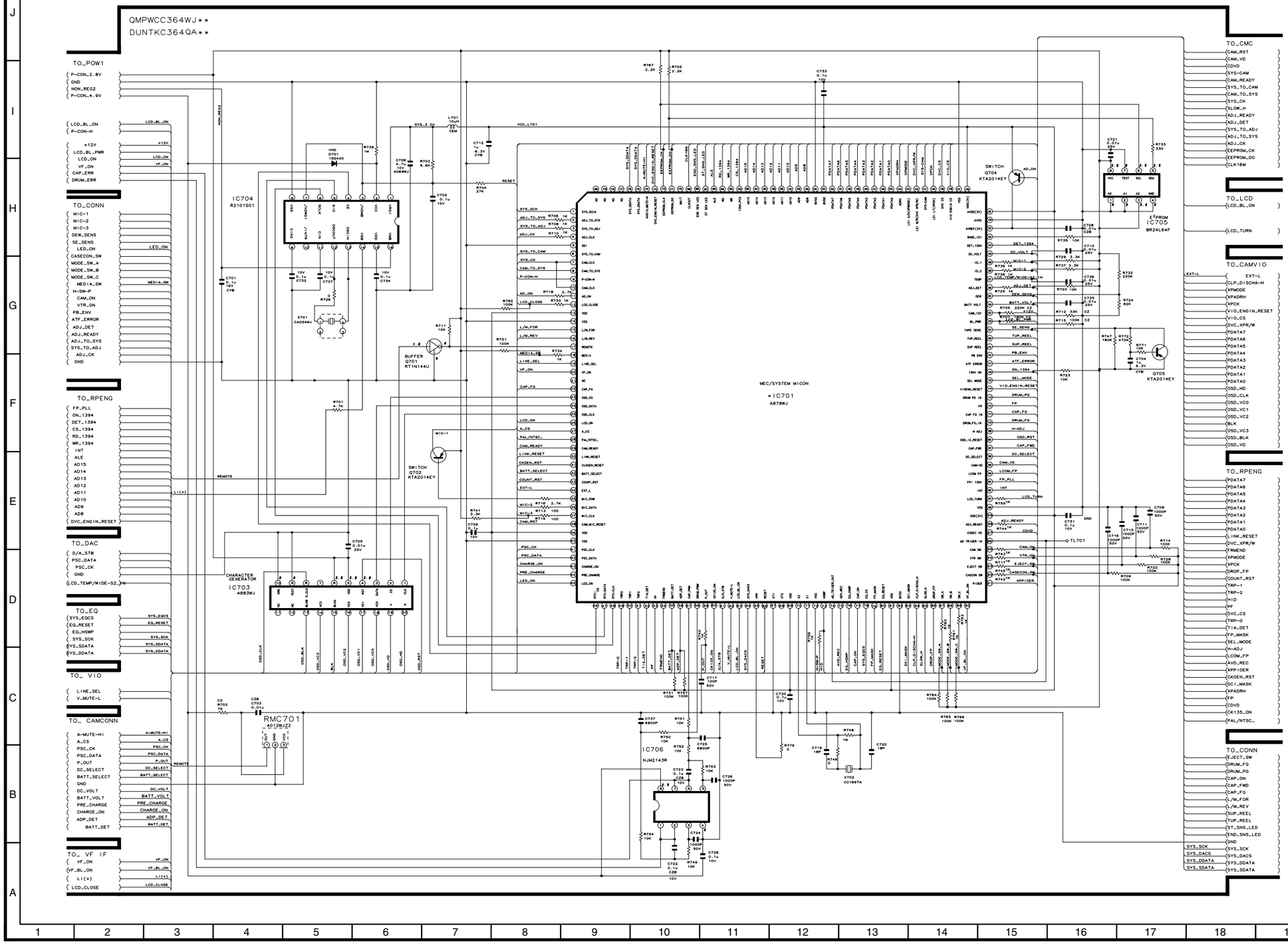
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-2. REC/PB ENGINE SCHEMATIC DIAGRAM (VL-Z300)



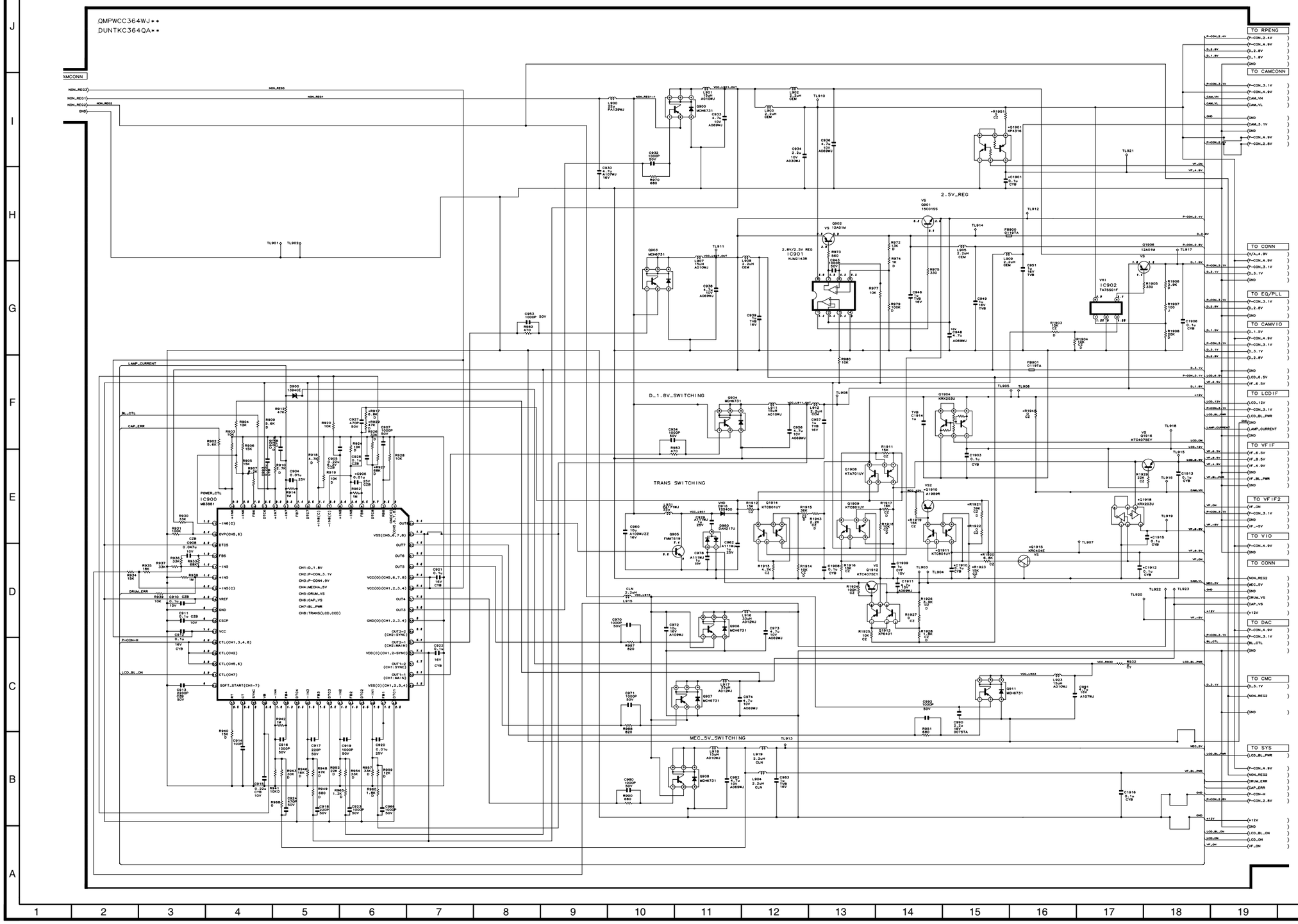
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-3. MEC/SYS MiCON SCHEMATIC DIAGRAM



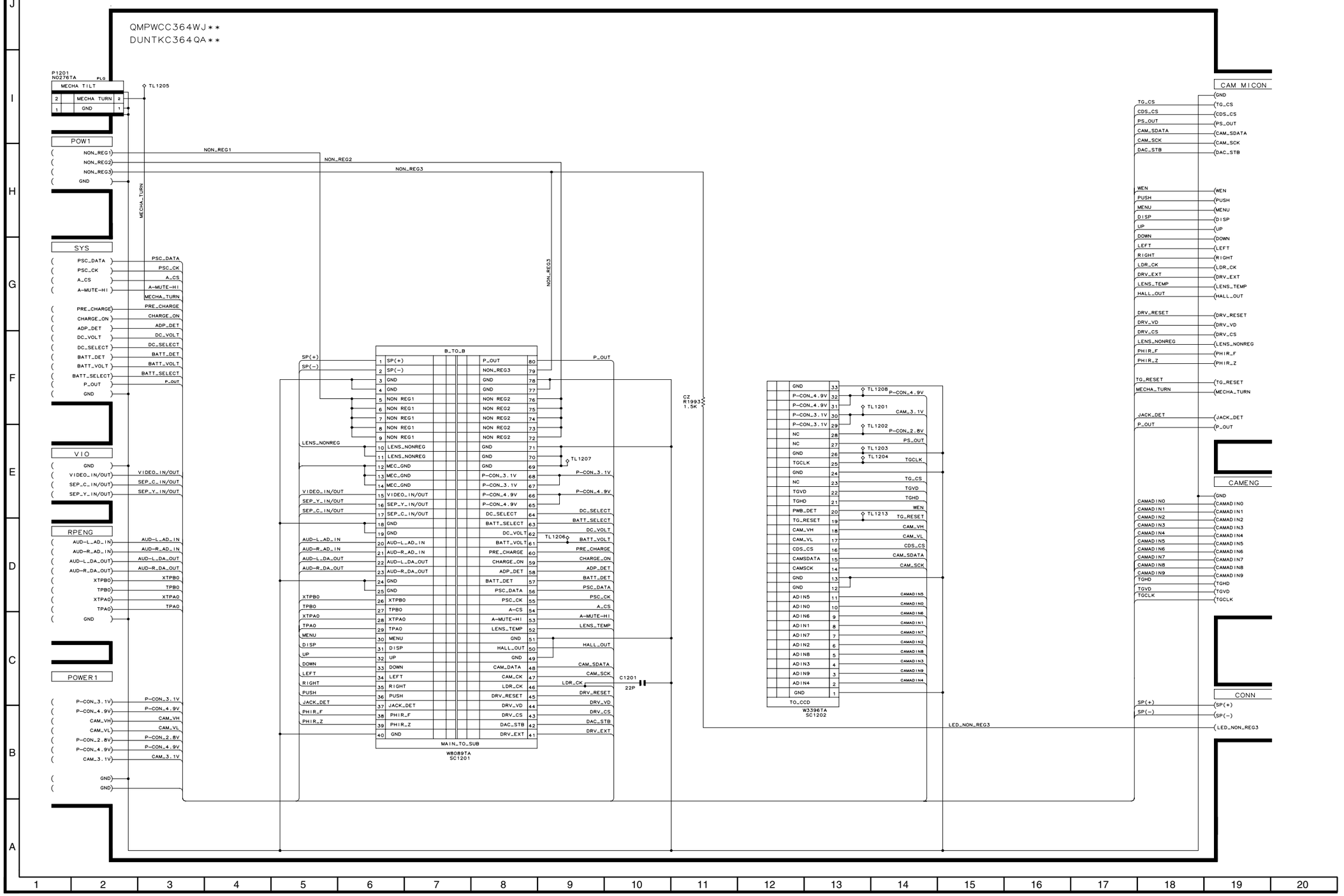
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-4. POWER1 SCHEMATIC DIAGRAM



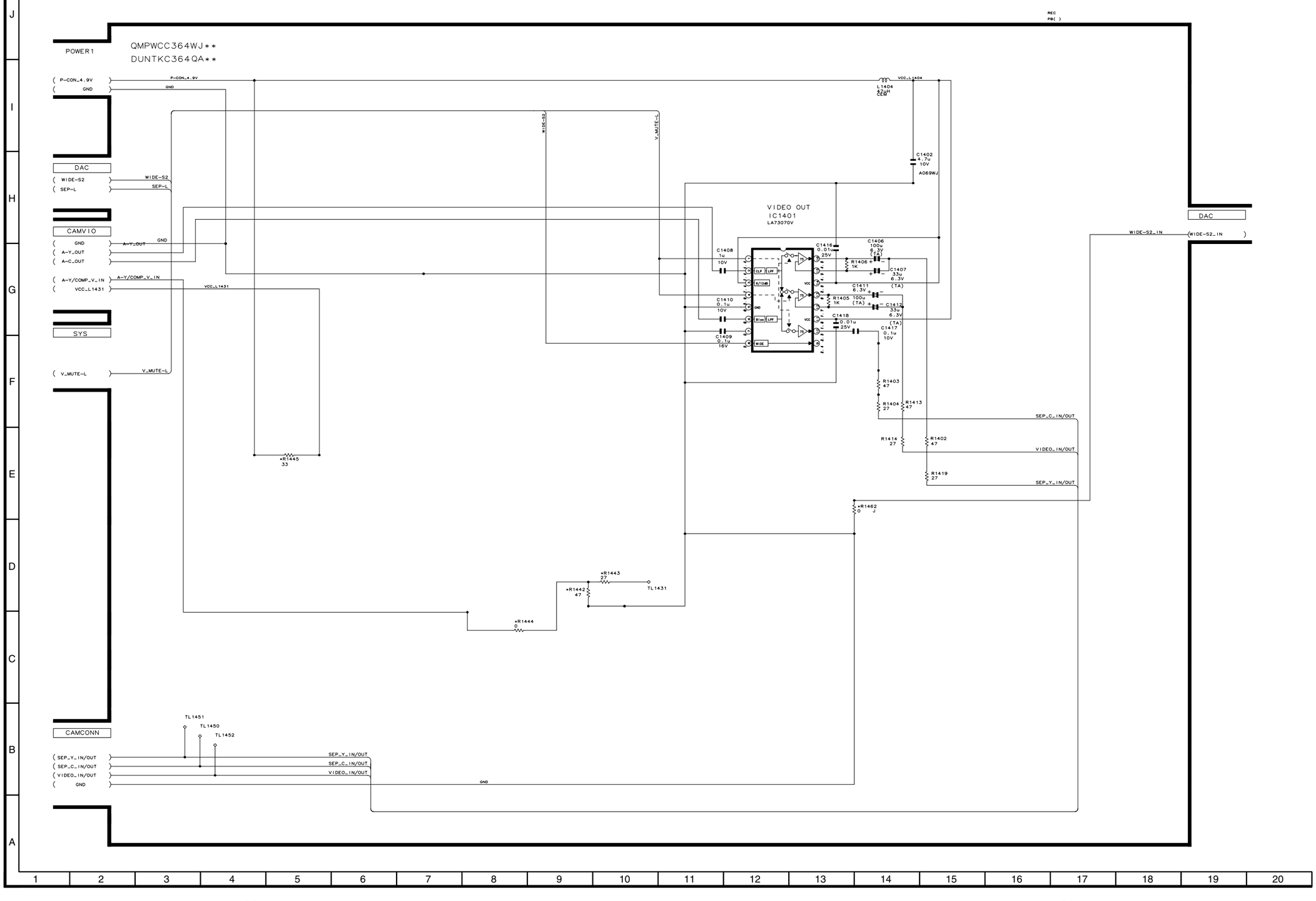
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-5. CAMERA CONN SCHEMATIC DIAGRAM



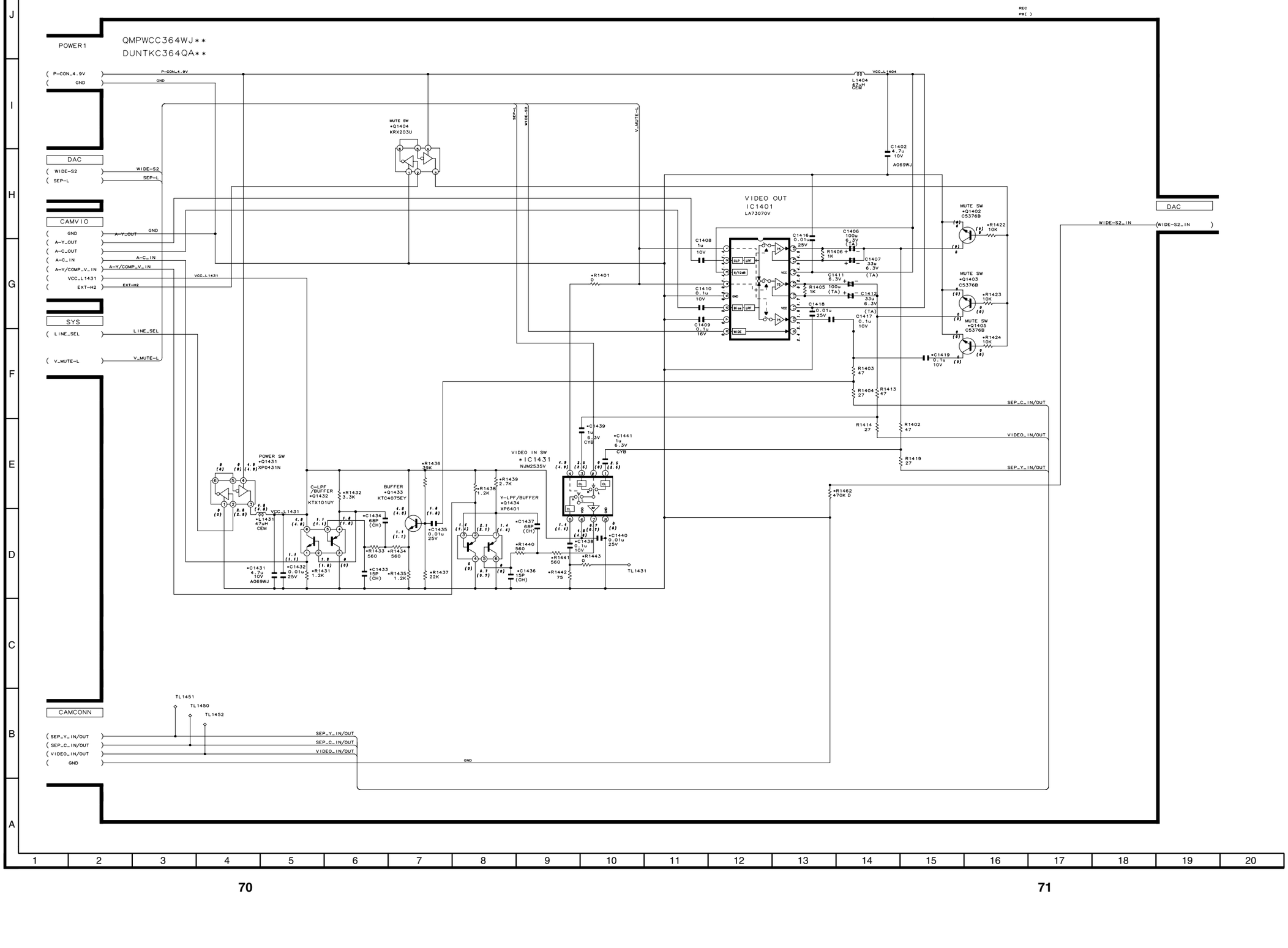
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-6. VIDEO I/O SCHEMATIC DIAGRAM (VL-Z100)



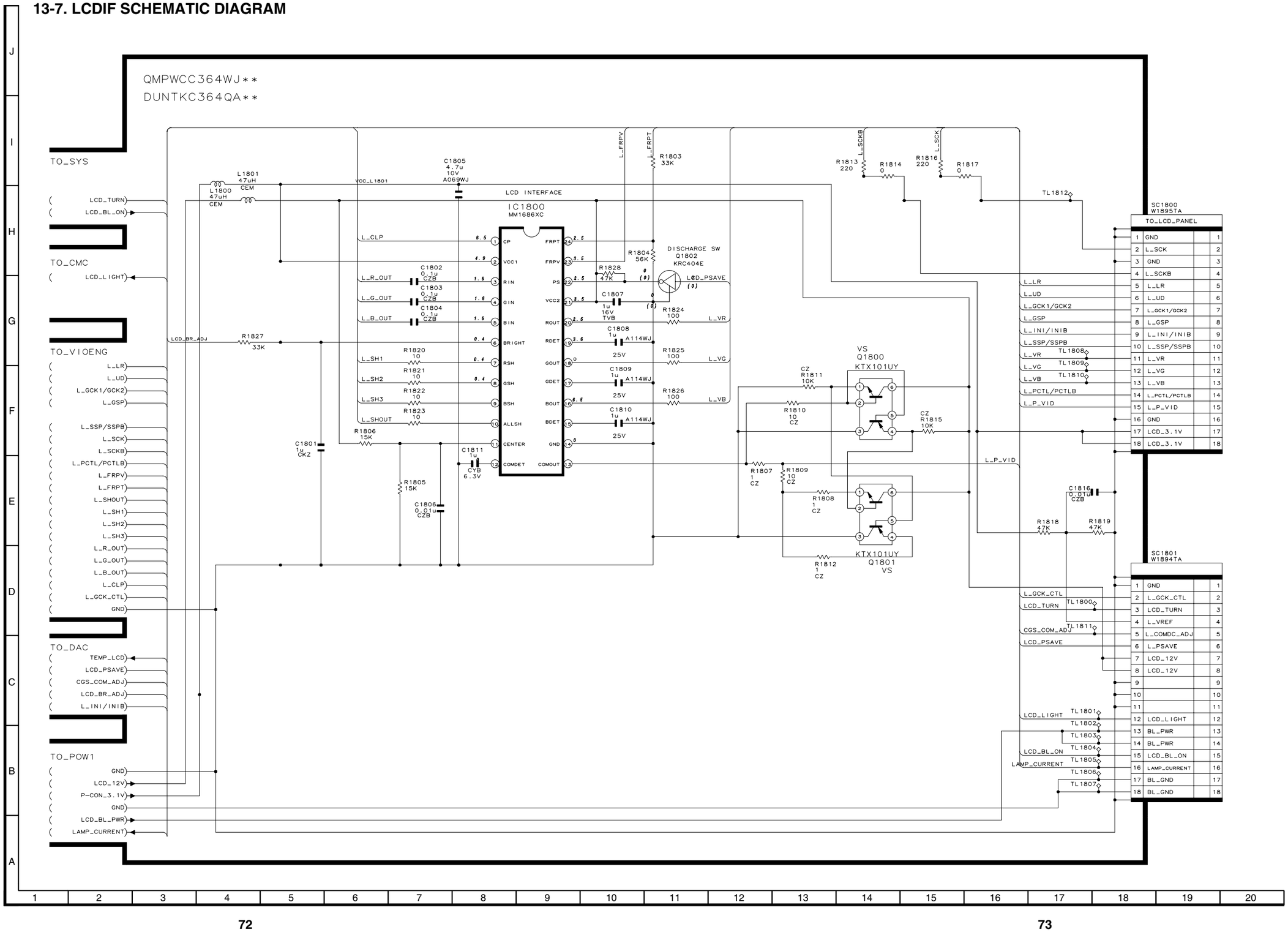
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-6. VIDEO I/O SCHEMATIC DIAGRAM (VL-Z300)



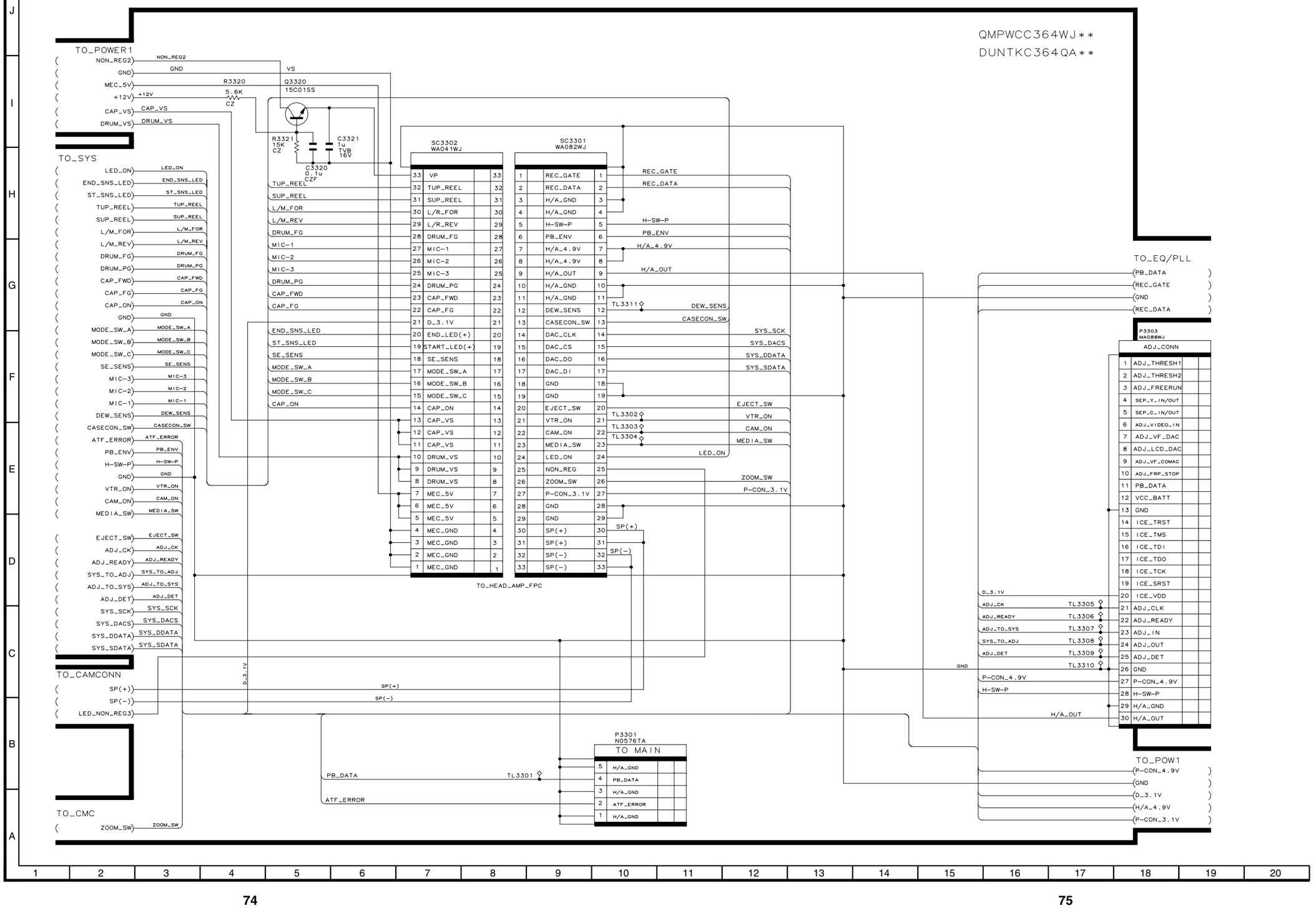
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-7. LCDIF SCHEMATIC DIAGRAM



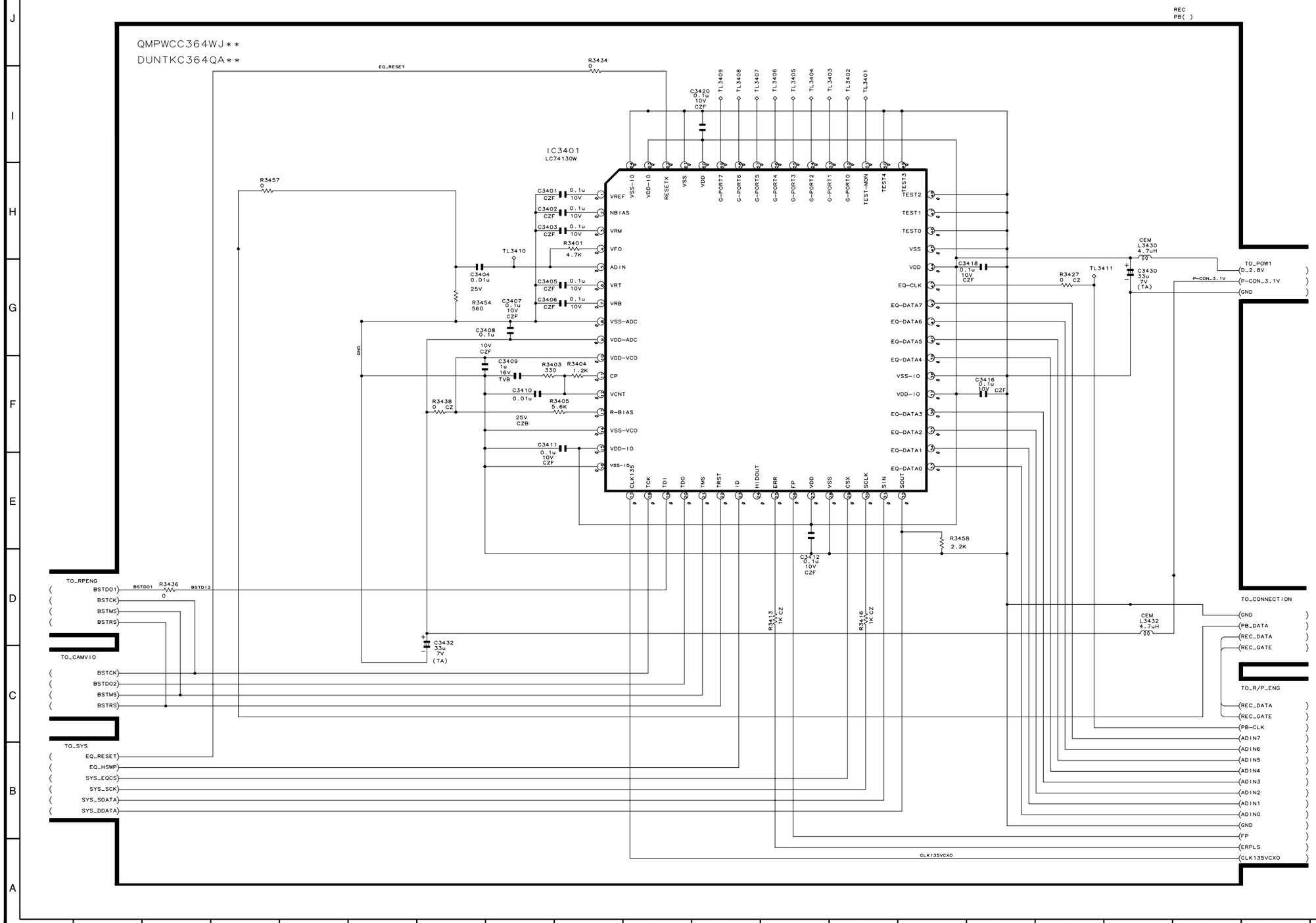
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-8. CONNECTION(B-B) SCHEMATIC DIAGRAM



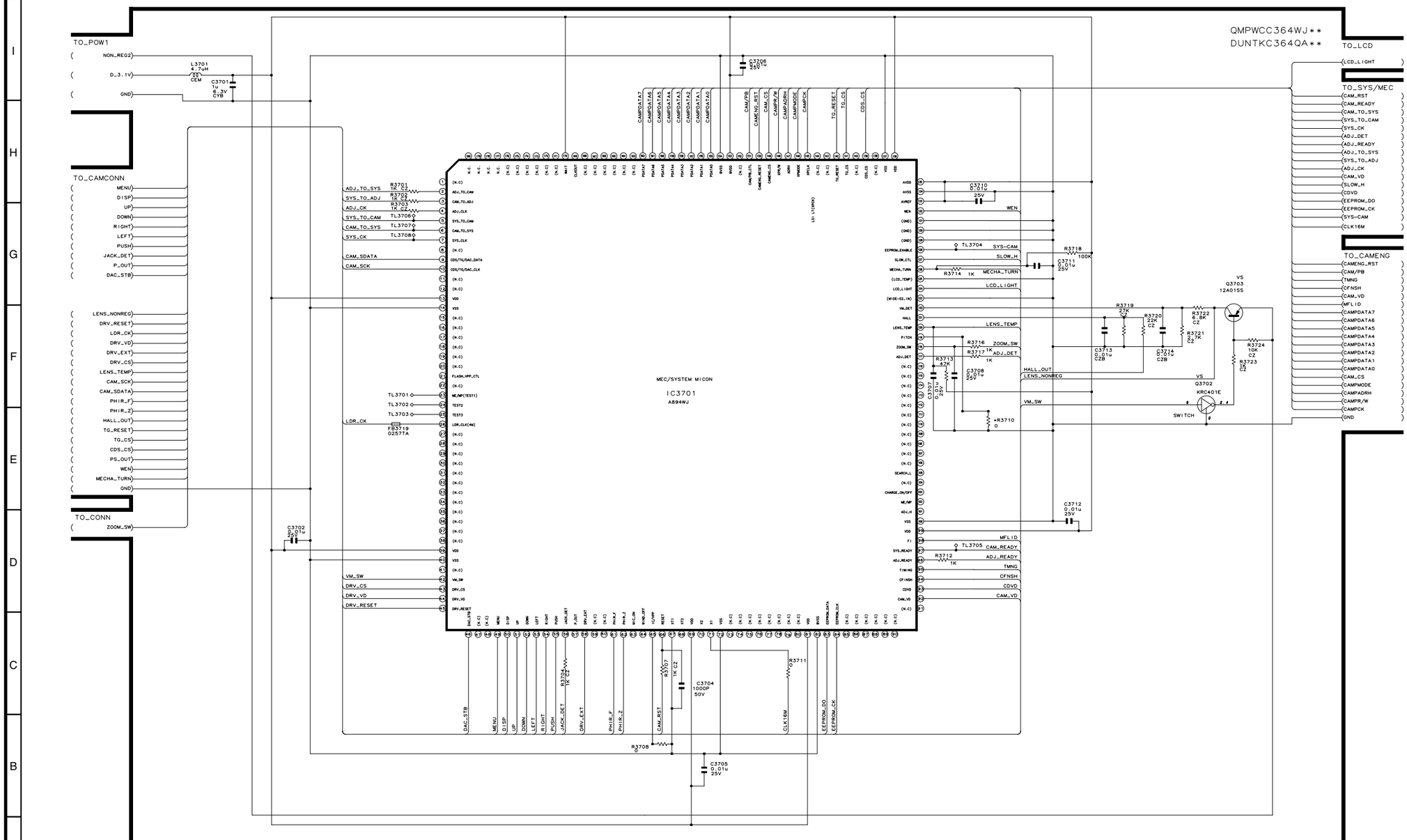
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-9. EQ/PLL SCHEMATIC DIAGRAM



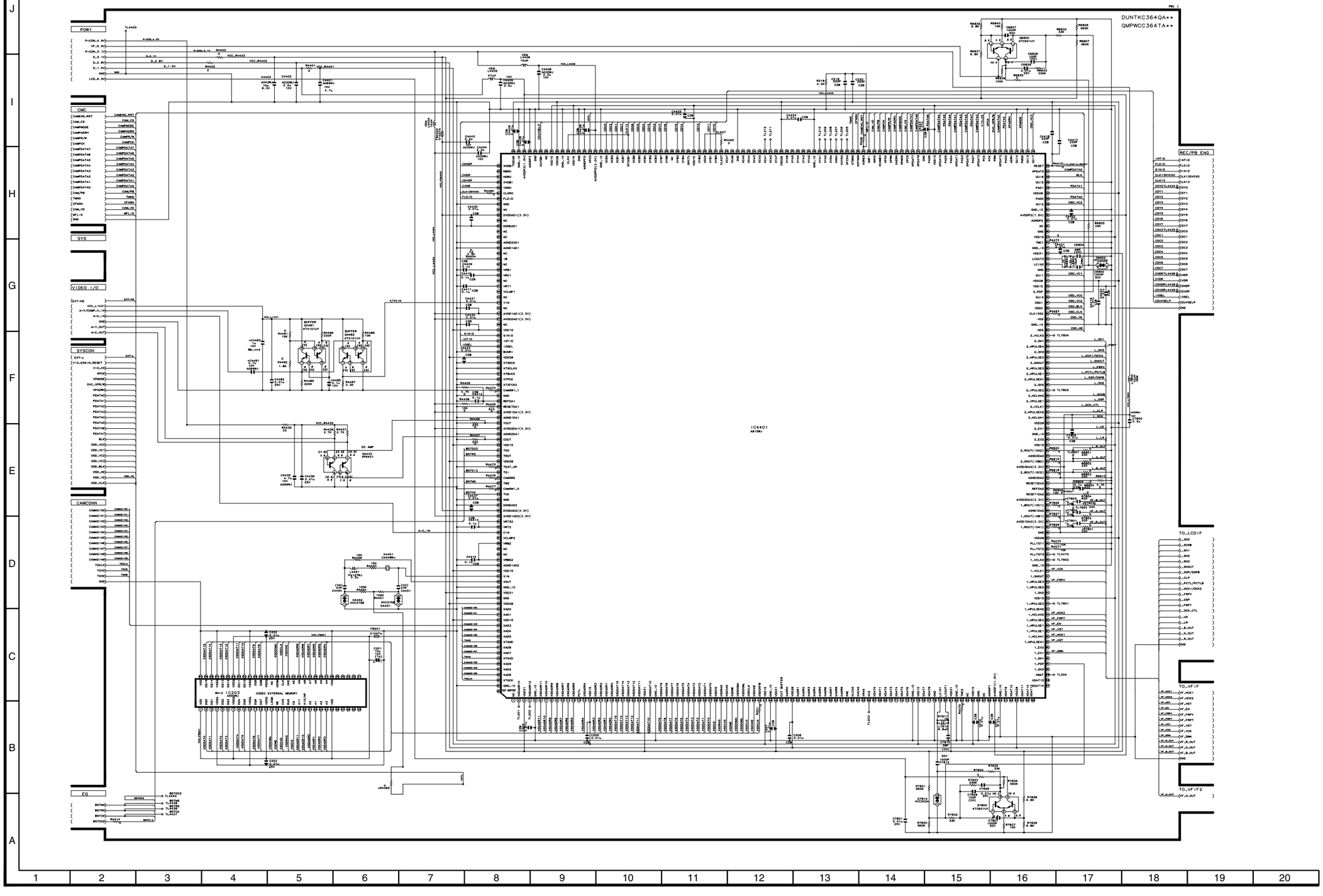
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-10. CAM/MiCON SCHEMATIC DIAGRAM



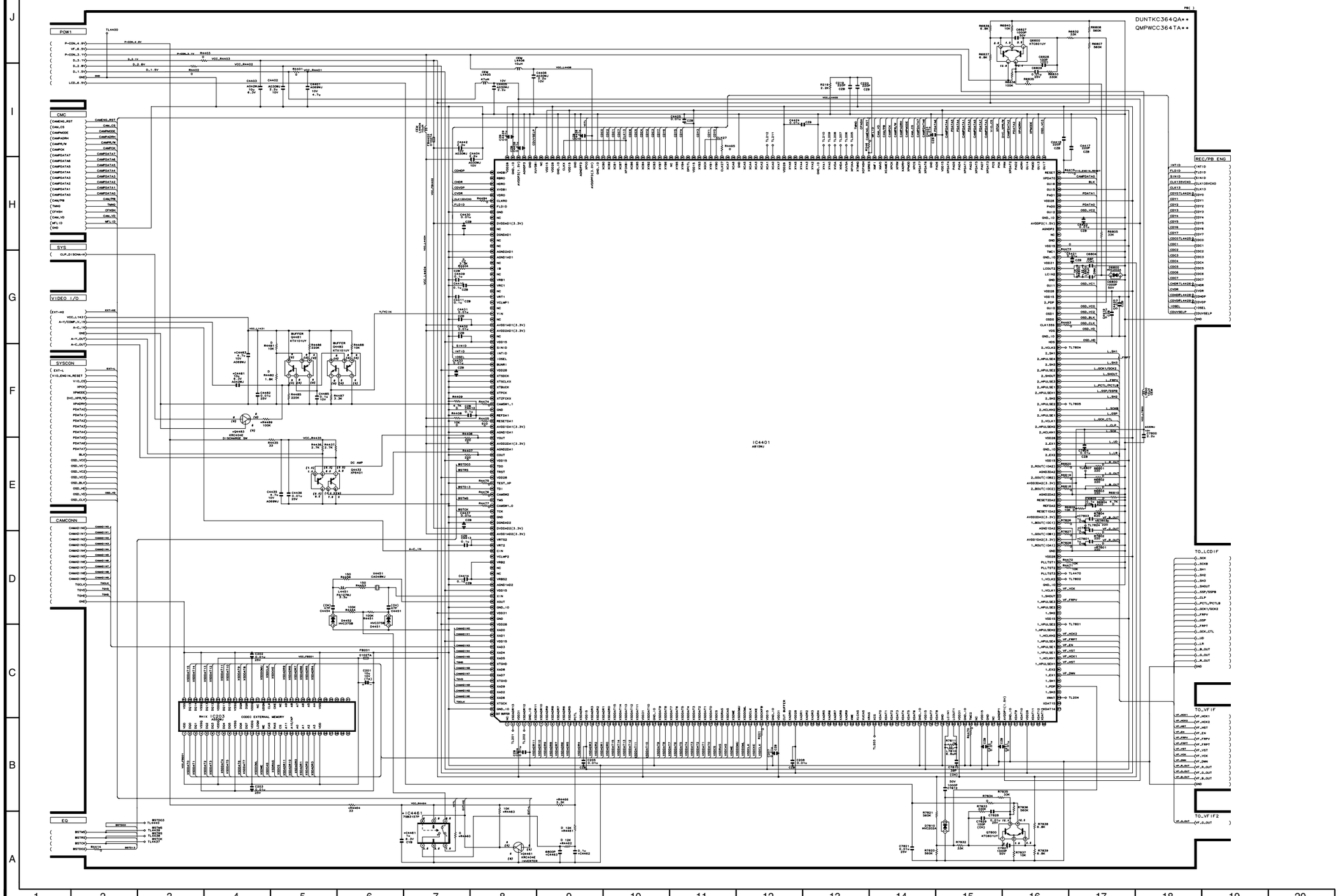
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-11. CAMERA VIDEO I/O ENGINE SCHEMATIC DIAGRAM (VL-Z100)



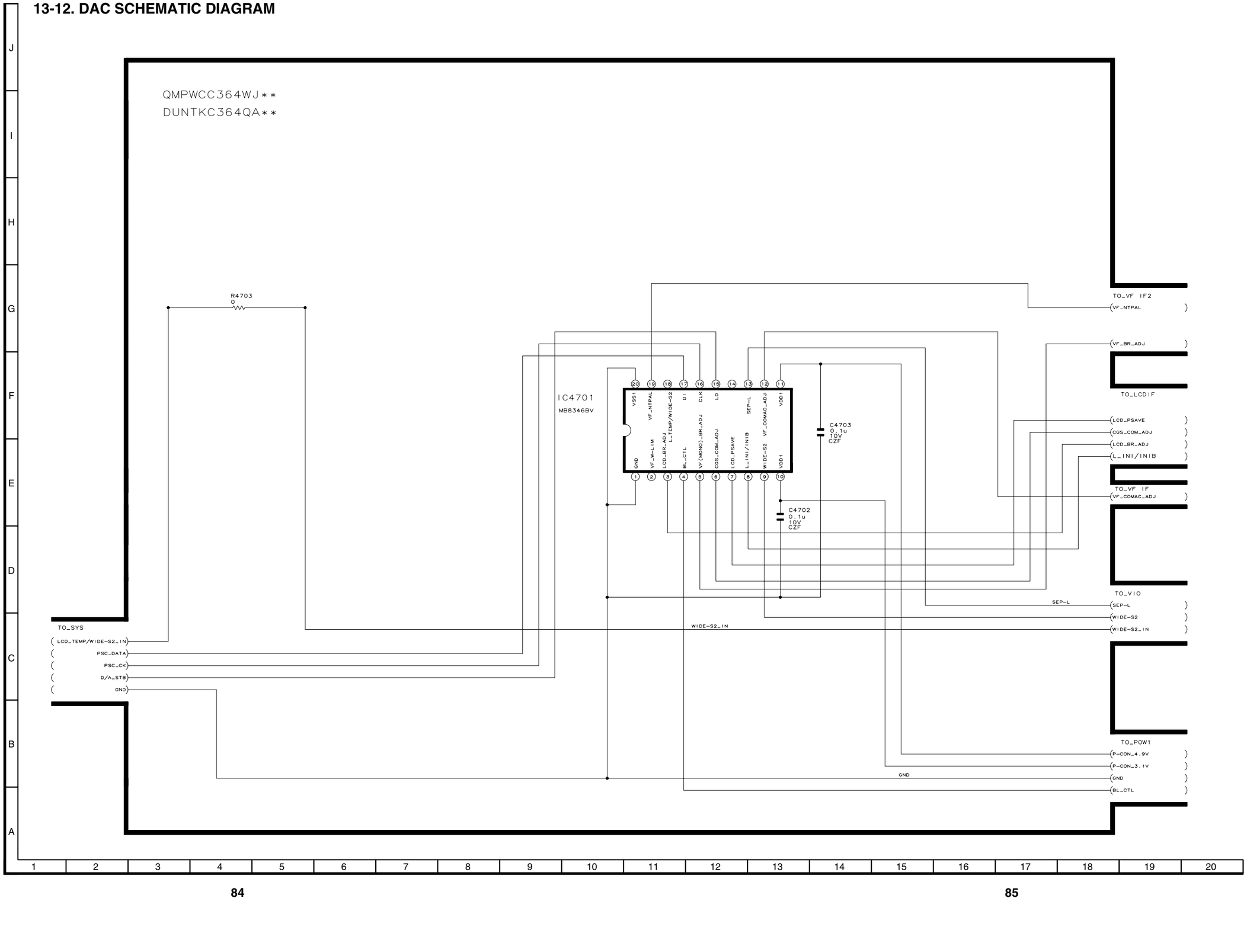
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-11. CAMERA VIDEO I/O ENGINE SCHEMATIC DIAGRAM (VL-Z300)



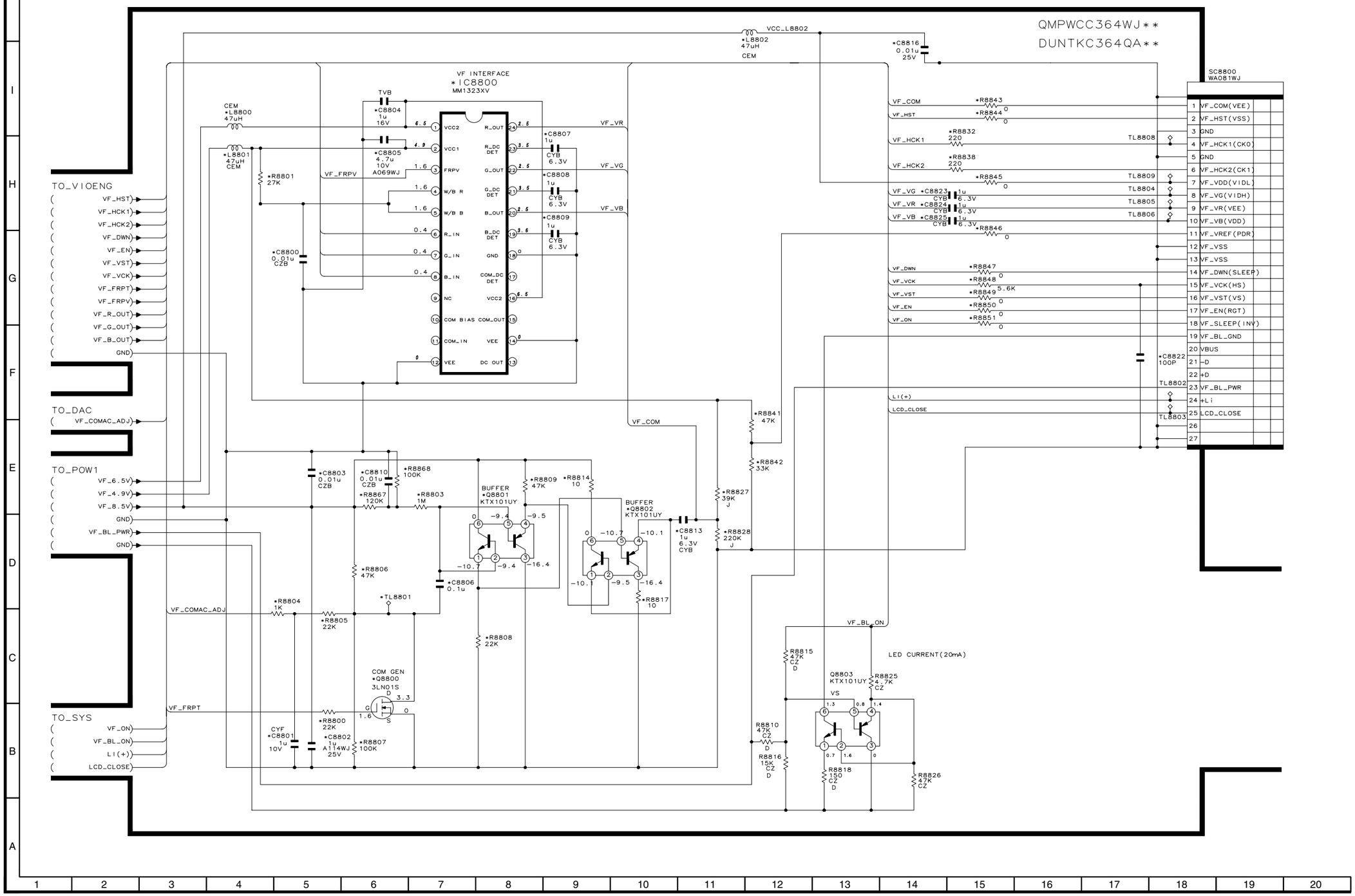
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-12. DAC SCHEMATIC DIAGRAM



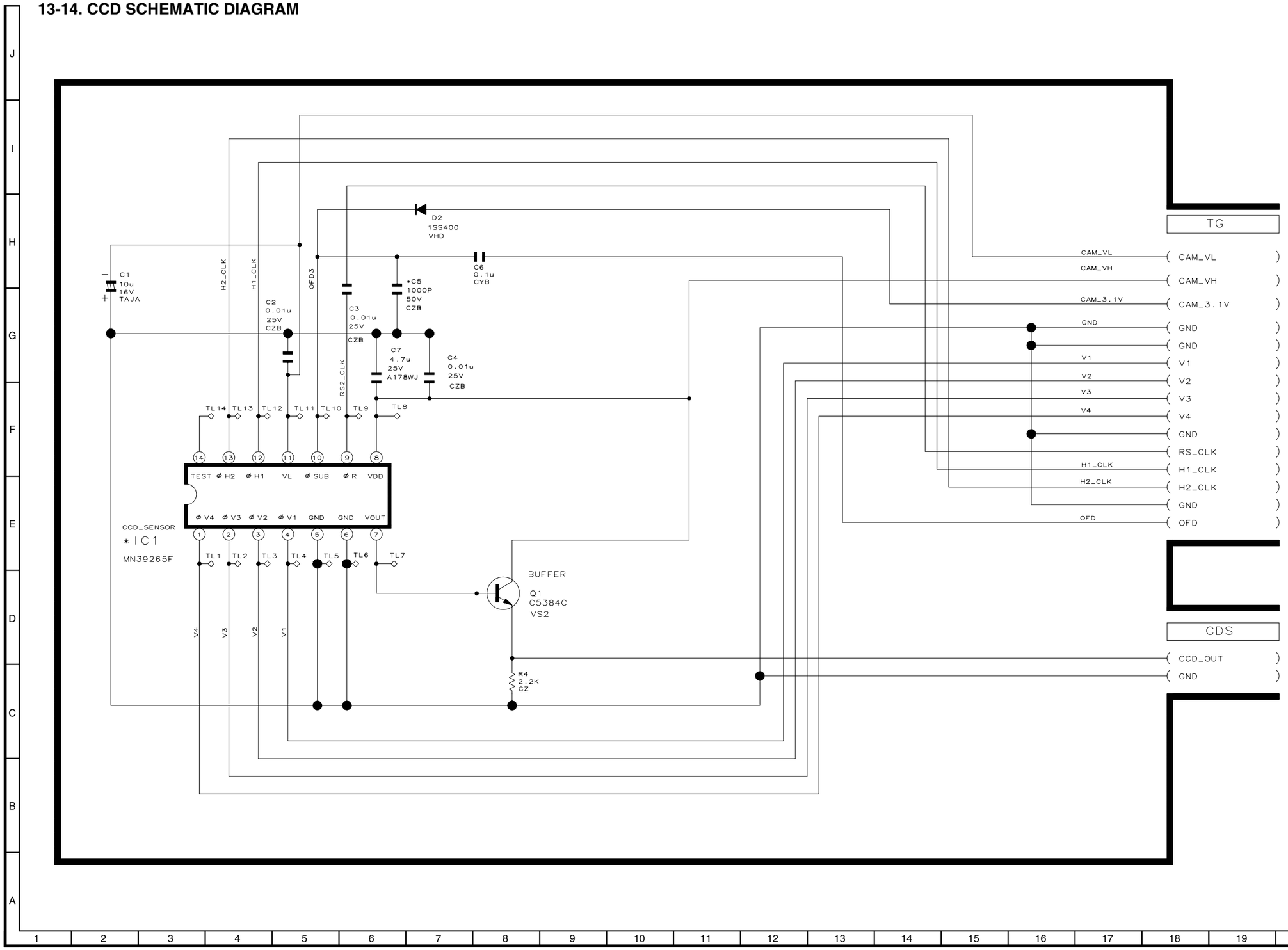
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-13. VFIF SCHEMATIC DIAGRAM



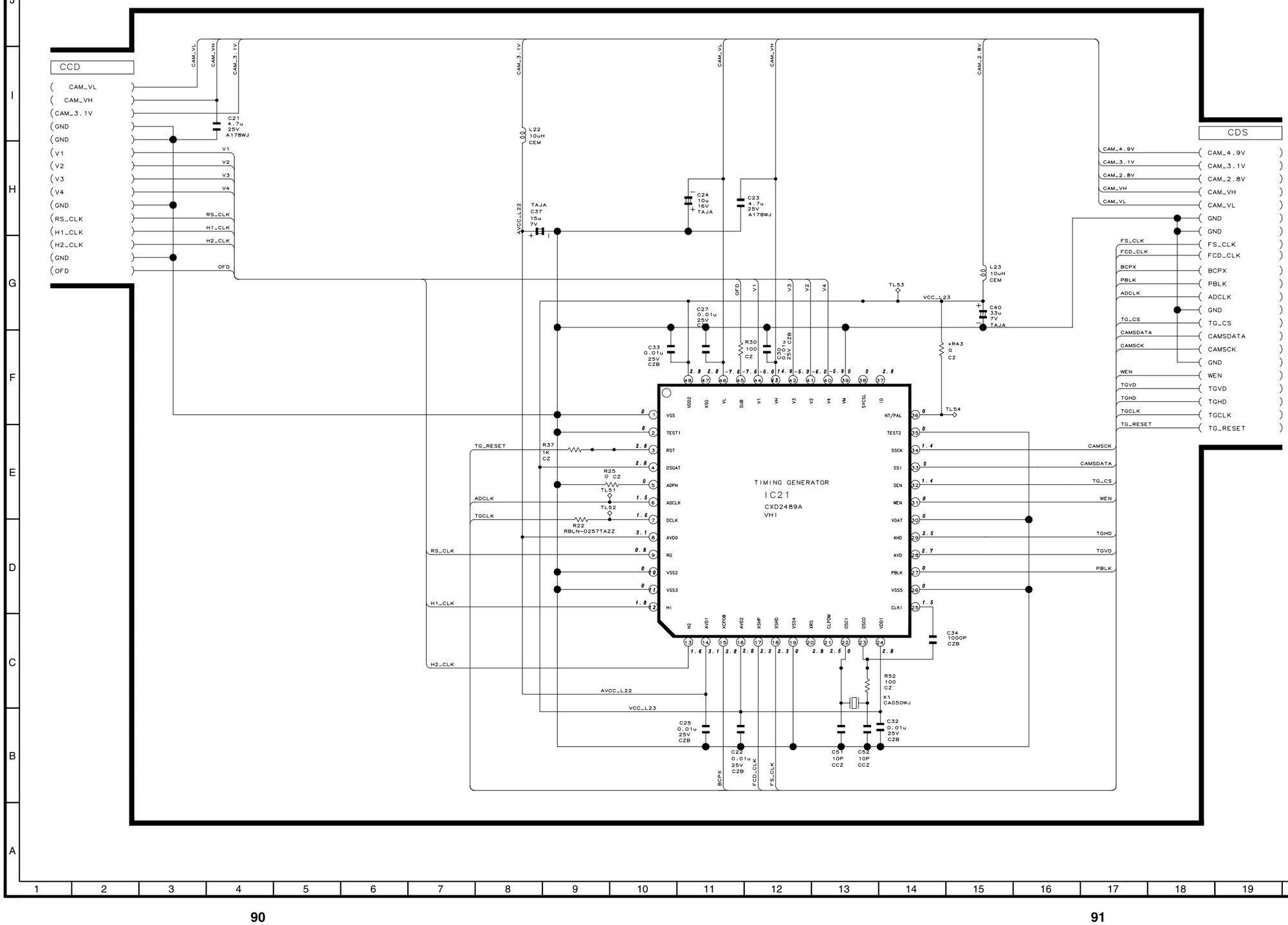
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-14. CCD SCHEMATIC DIAGRAM



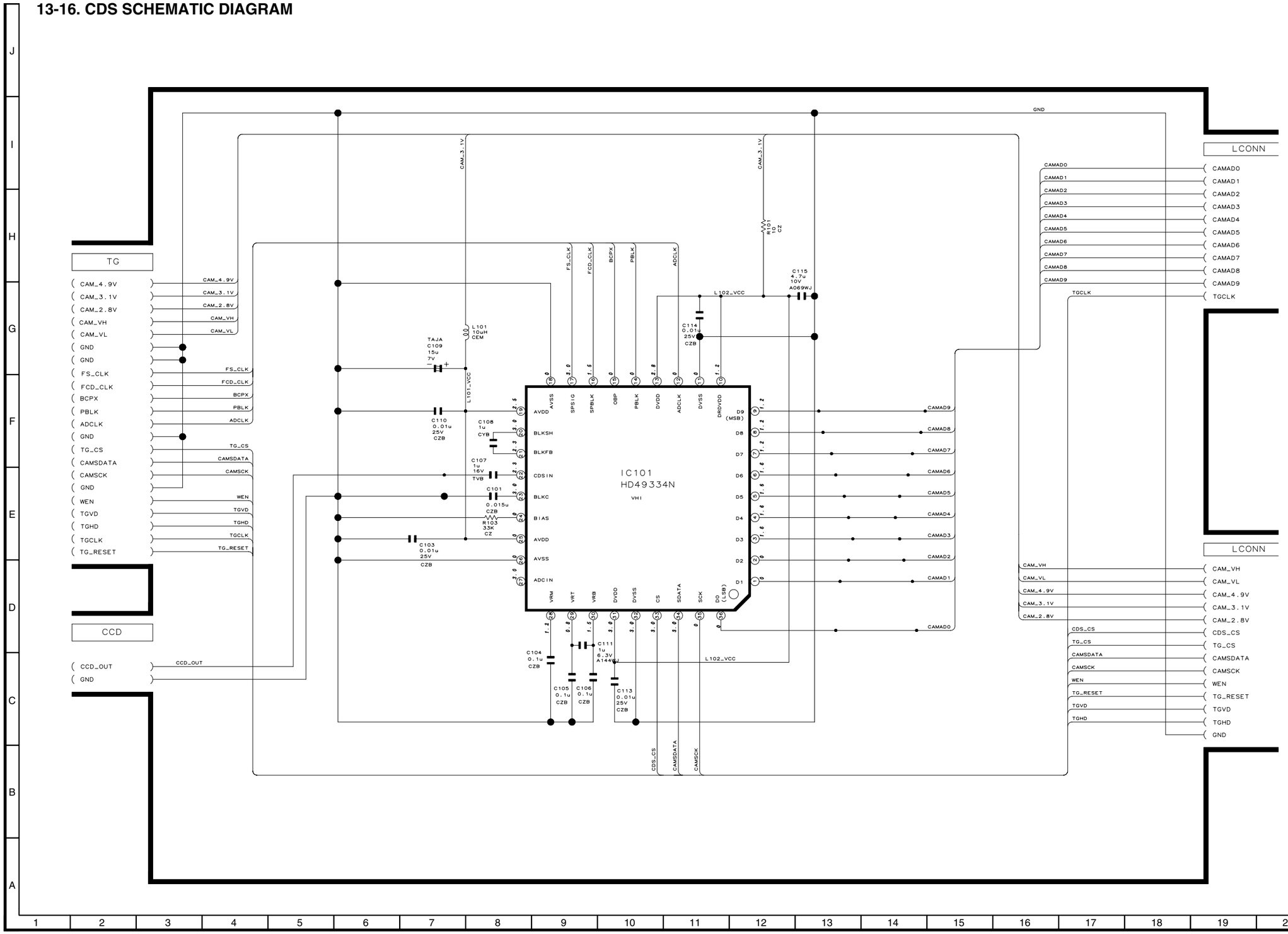
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-15. TG SCHEMATIC DIAGRAM



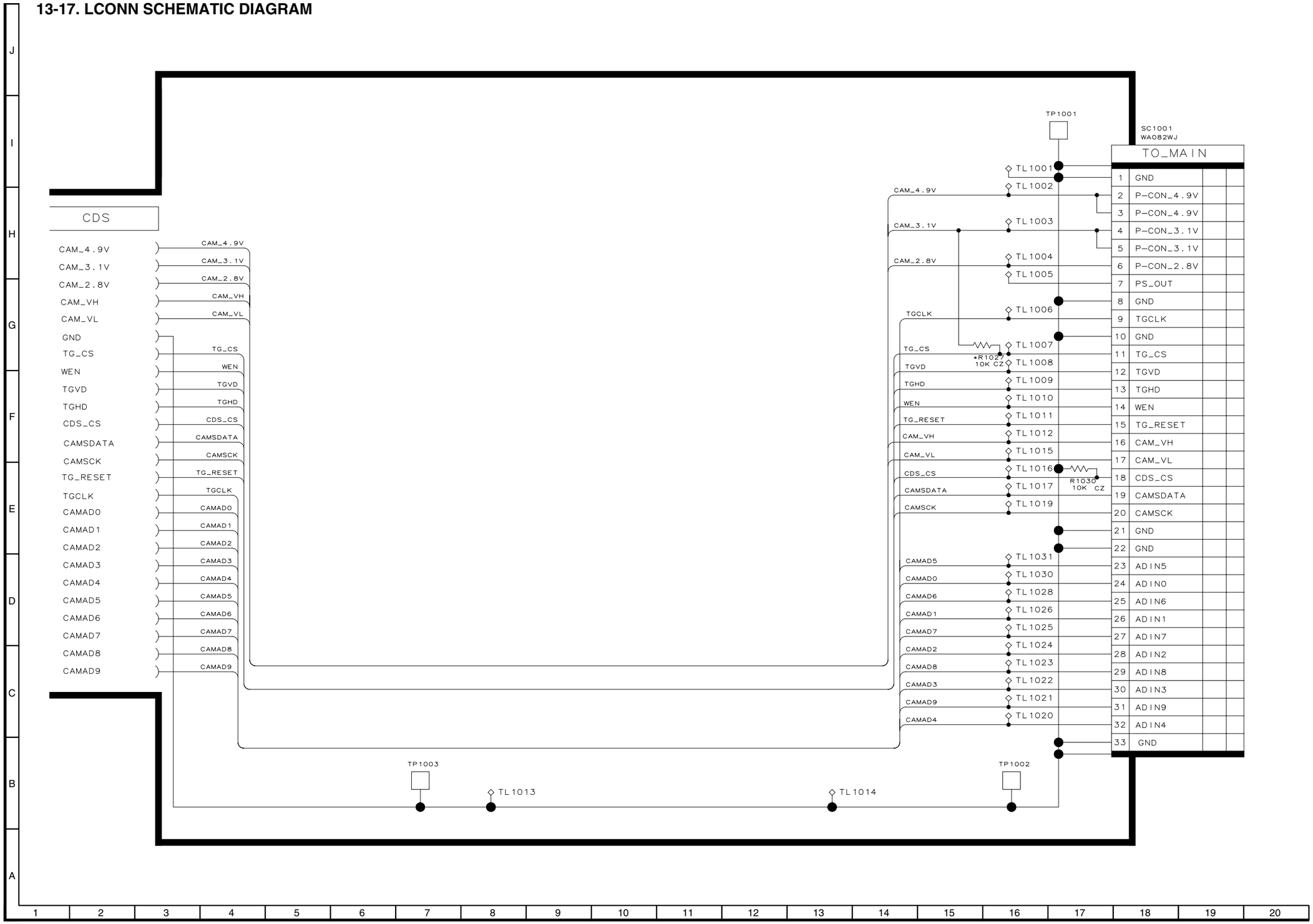
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-16. CDS SCHEMATIC DIAGRAM



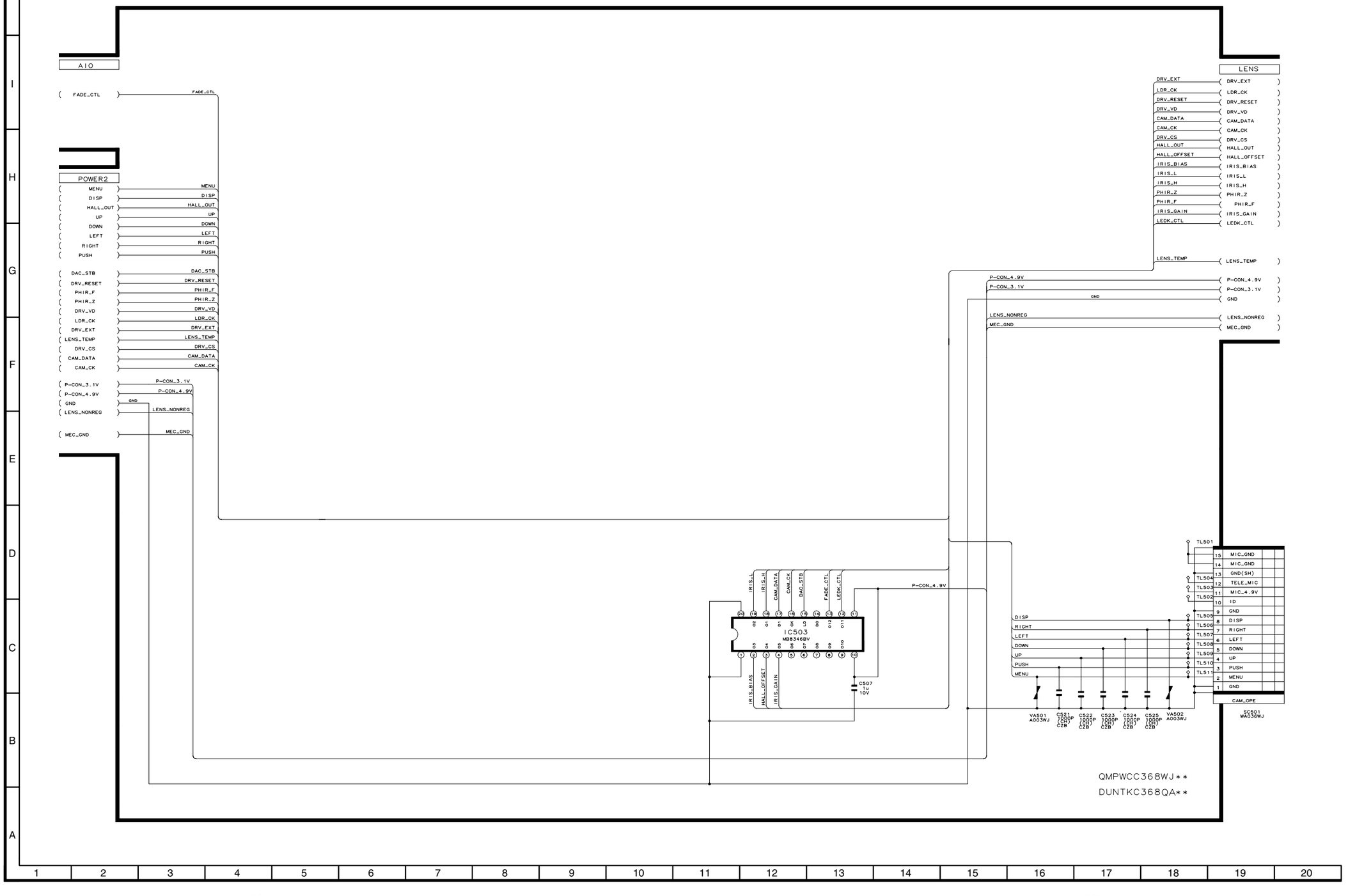
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-17. LCONN SCHEMATIC DIAGRAM



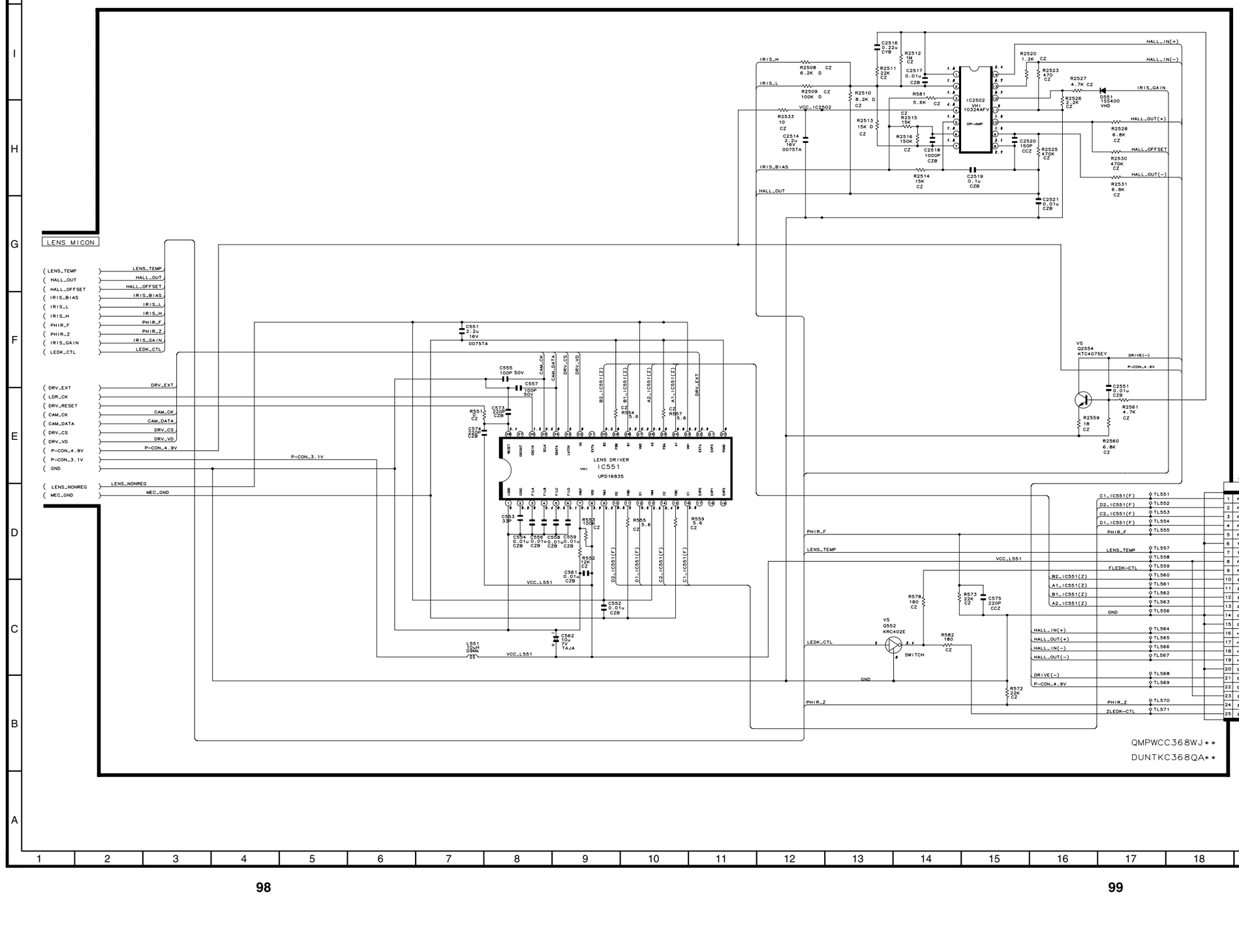
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-18. EXT DAC SCHEMATIC DIAGRAM



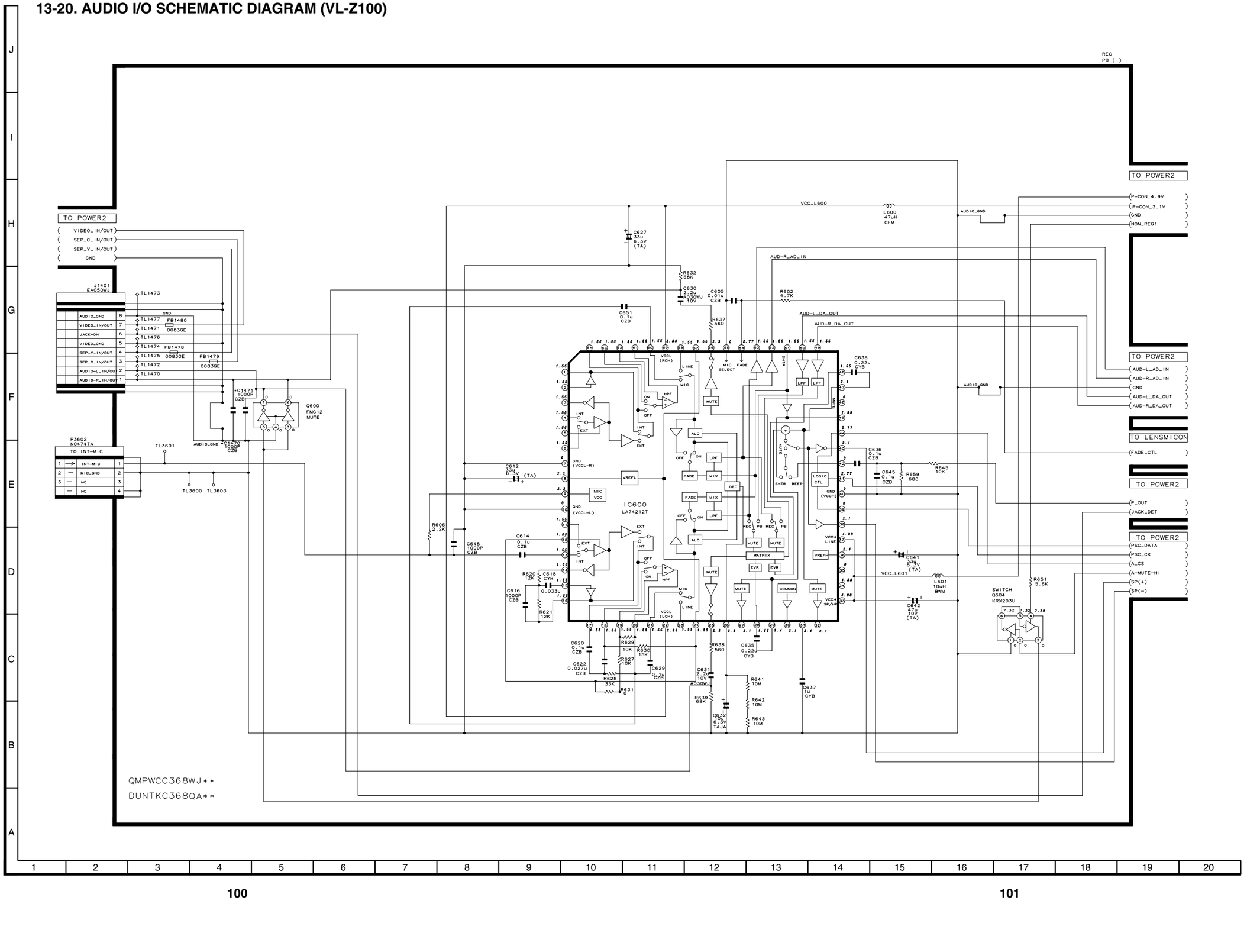
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-19. LENS DRIVE SCHEMATIC DIAGRAM



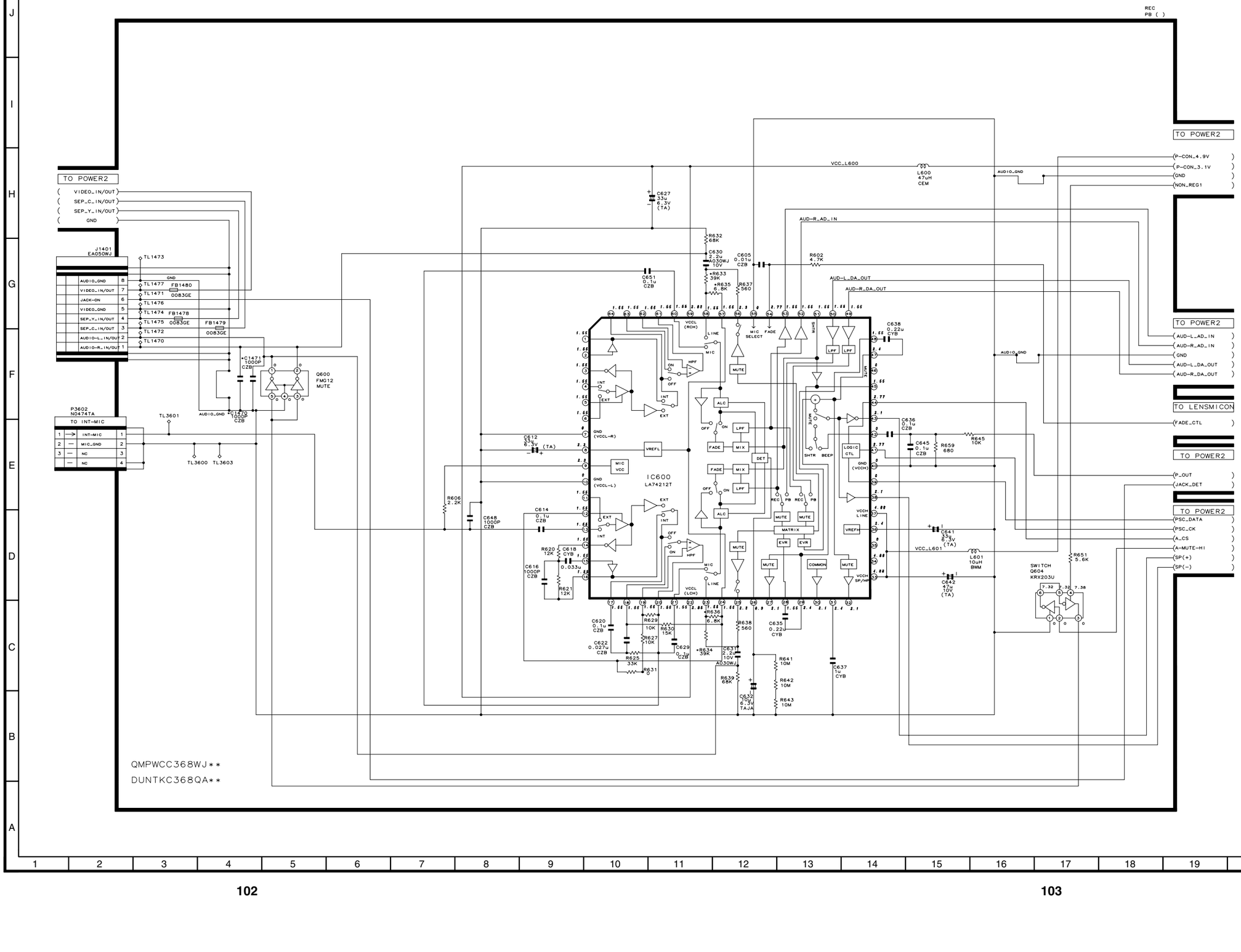
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-20. AUDIO I/O SCHEMATIC DIAGRAM (VL-Z100)



VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

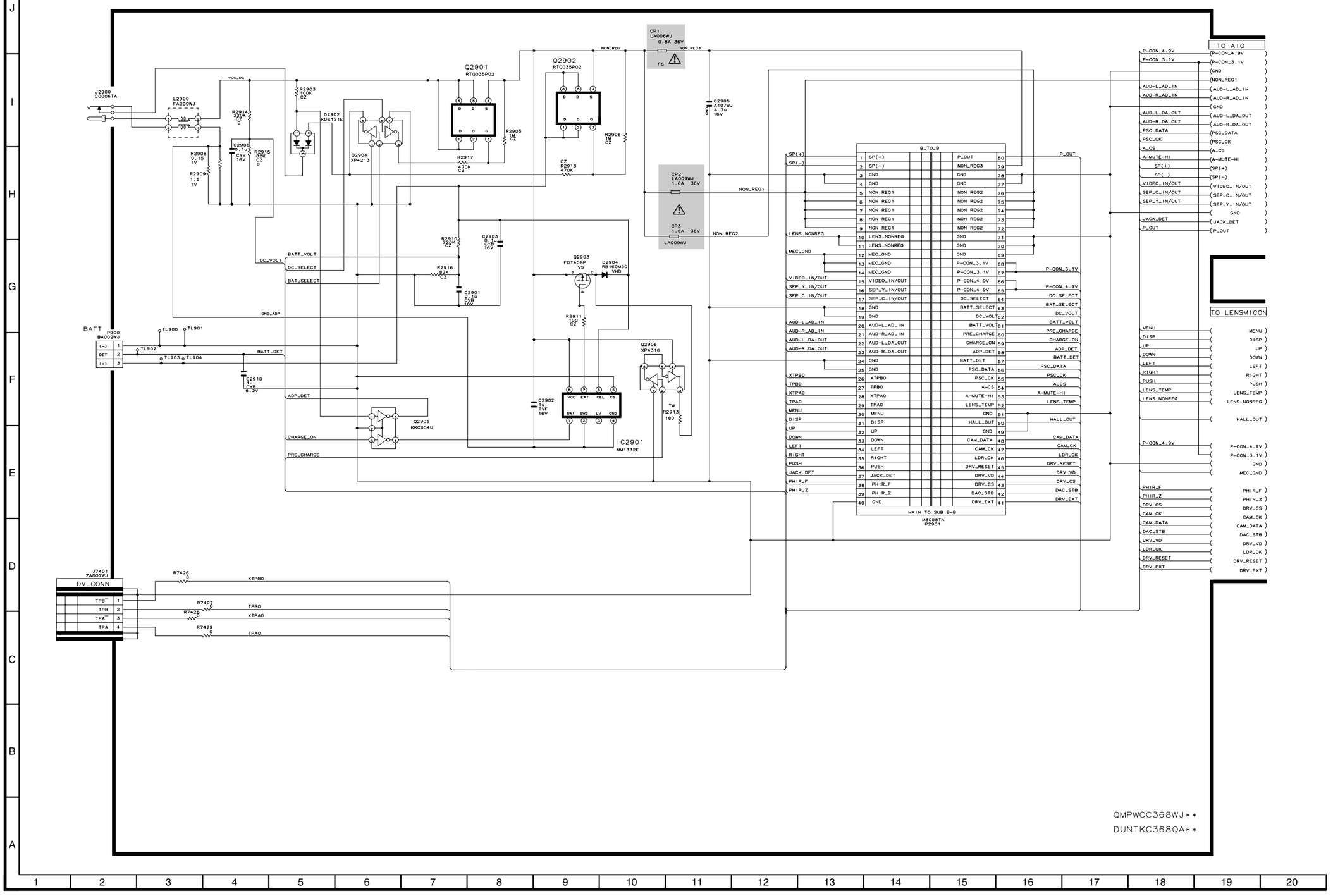
13-20. AUDIO I/O SCHEMATIC DIAGRAM (VL-Z300)



VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

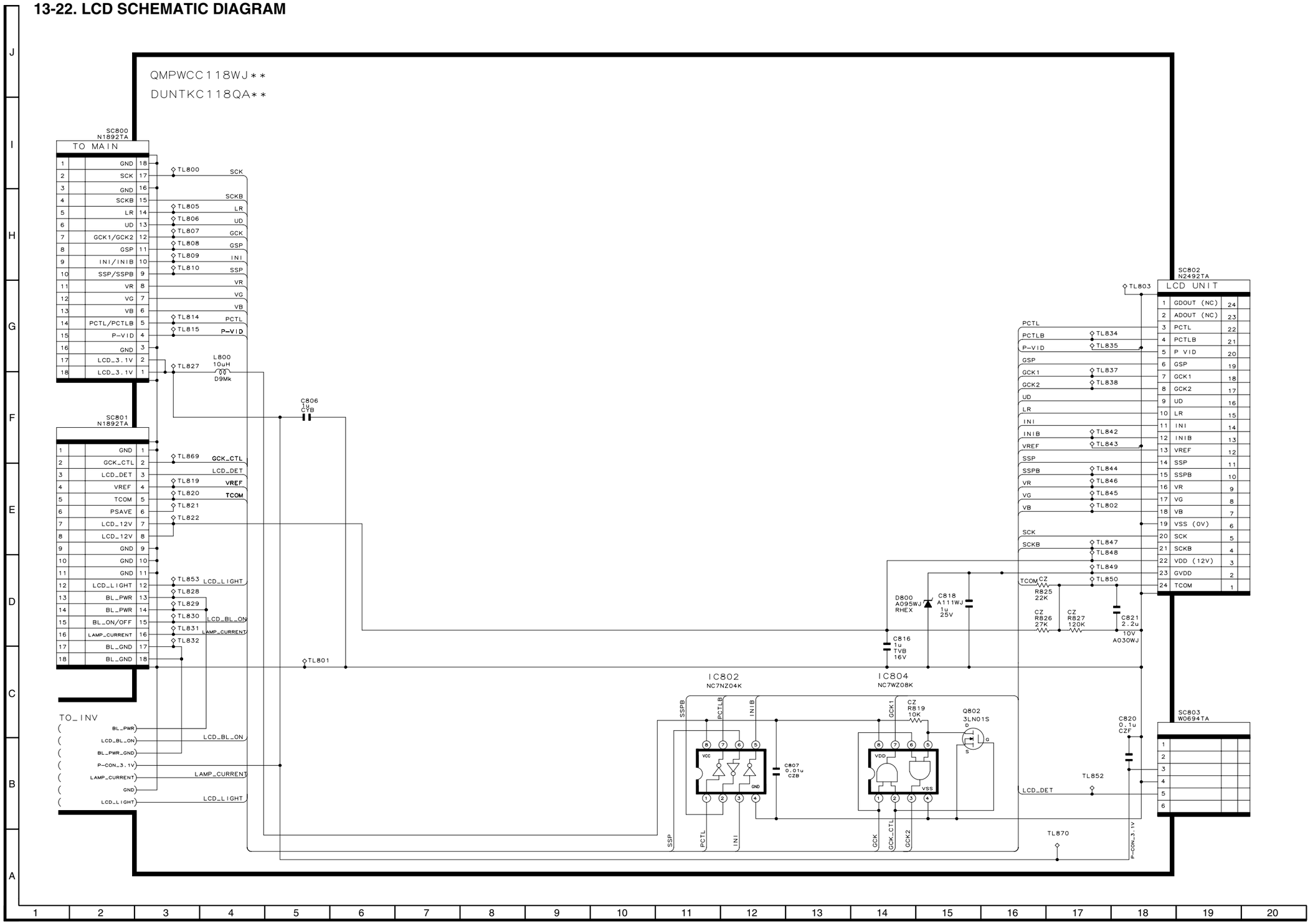
13-21. POWER2 SCHEMATIC DIAGRAM

⚠ AND SHADED COMPONENTS=SAFETY RELATED PARTS



VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-22. LCD SCHEMATIC DIAGRAM

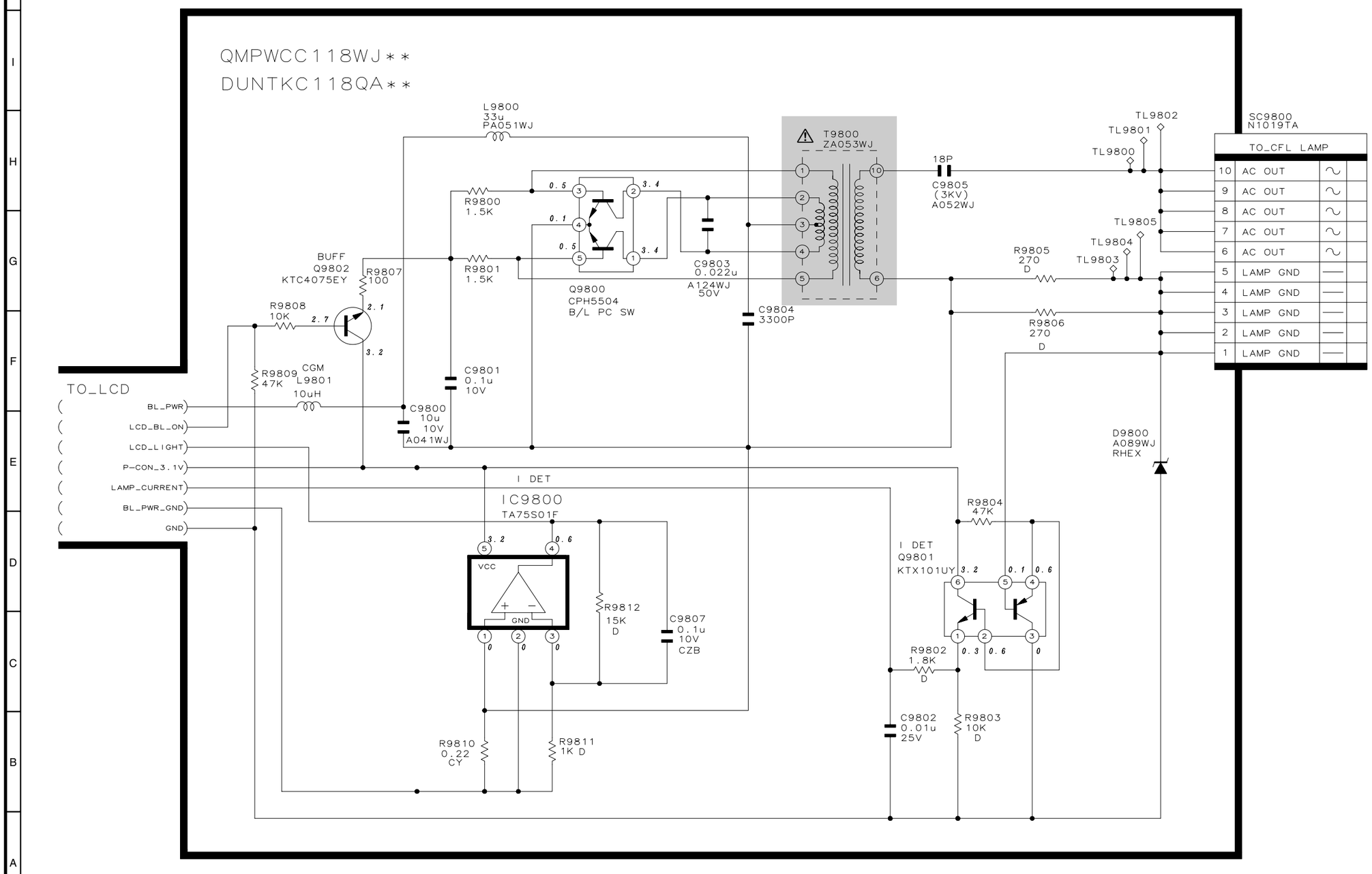


VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-23. INVERTER SCHEMATIC DIAGRAM

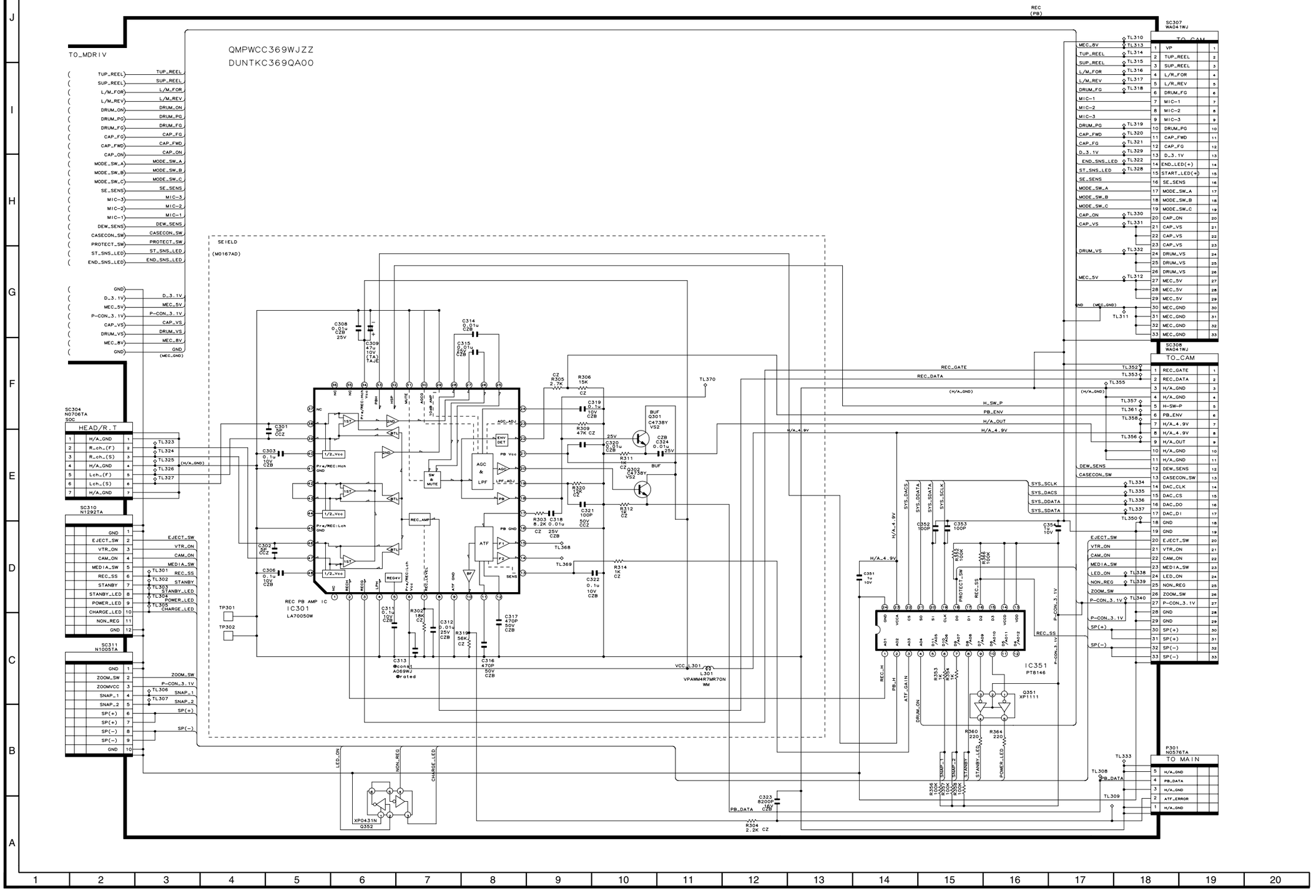
⚠ AND SHADED COMPONENTS=SAFETY RELATED PARTS

QMPWCC118WJ**
DUNTKC118QA**



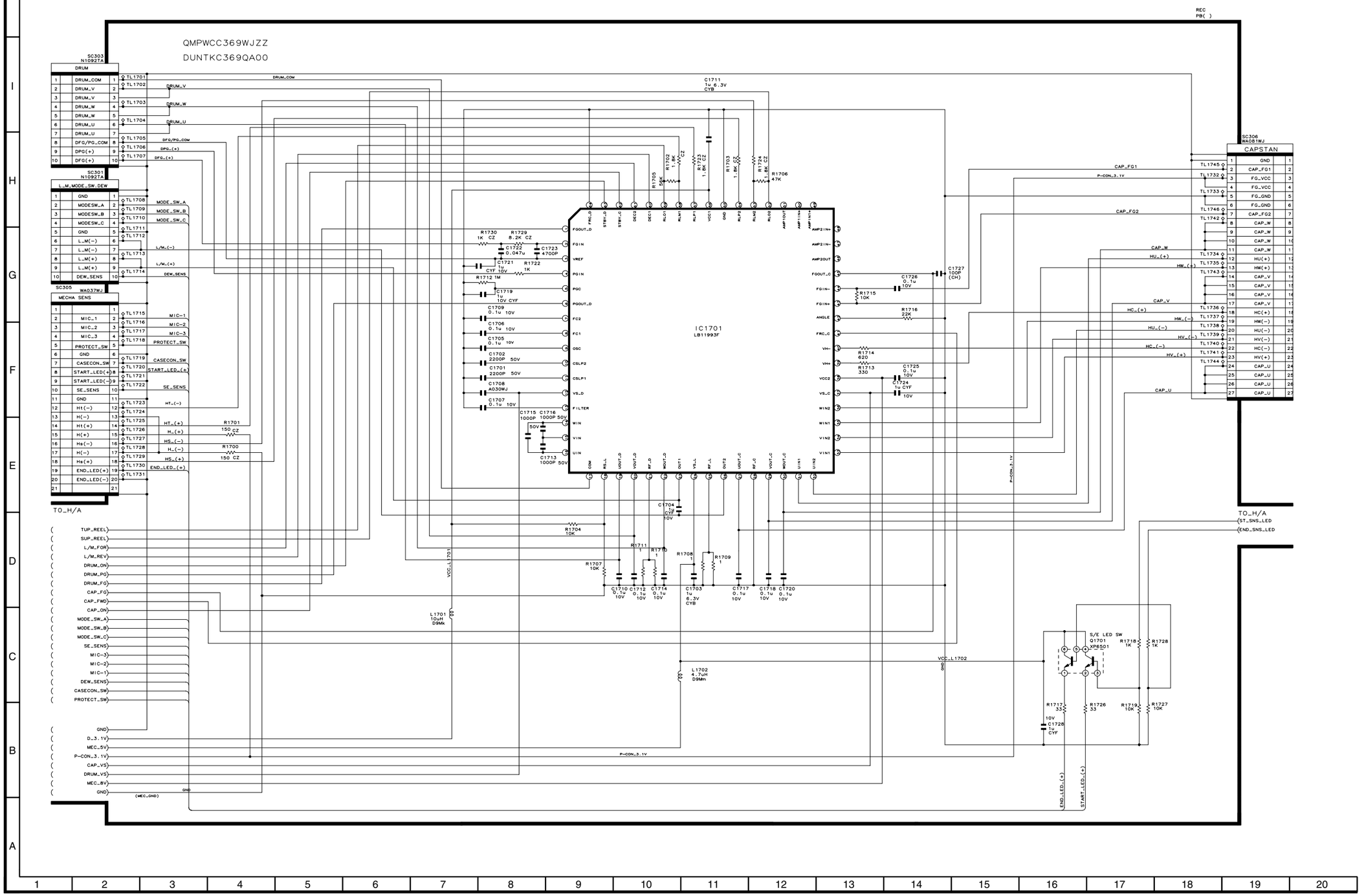
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-24. HEAD AMP SCHEMATIC DIAGRAM



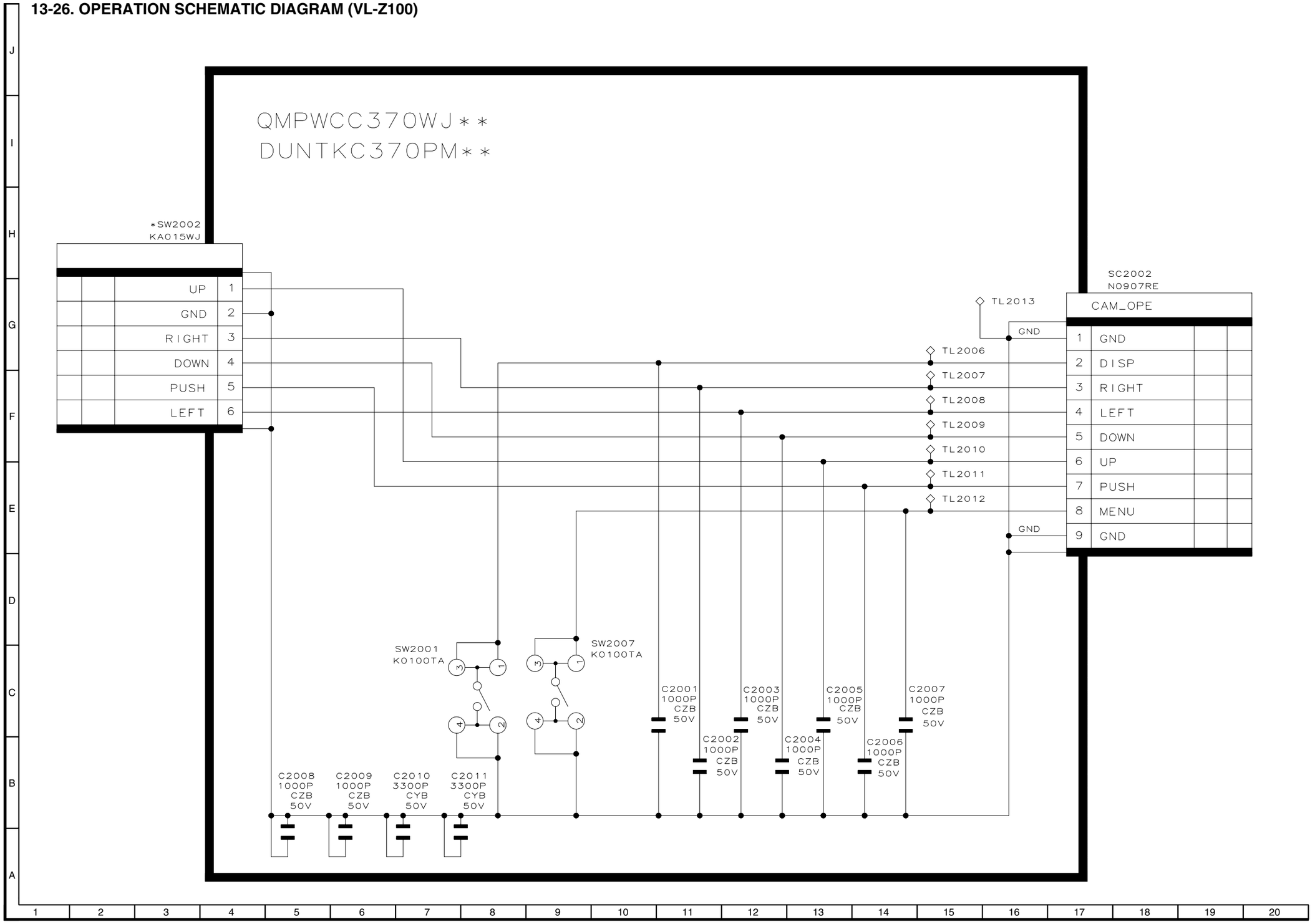
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-25. MOTOR DRIVE SCHEMATIC DIAGRAM



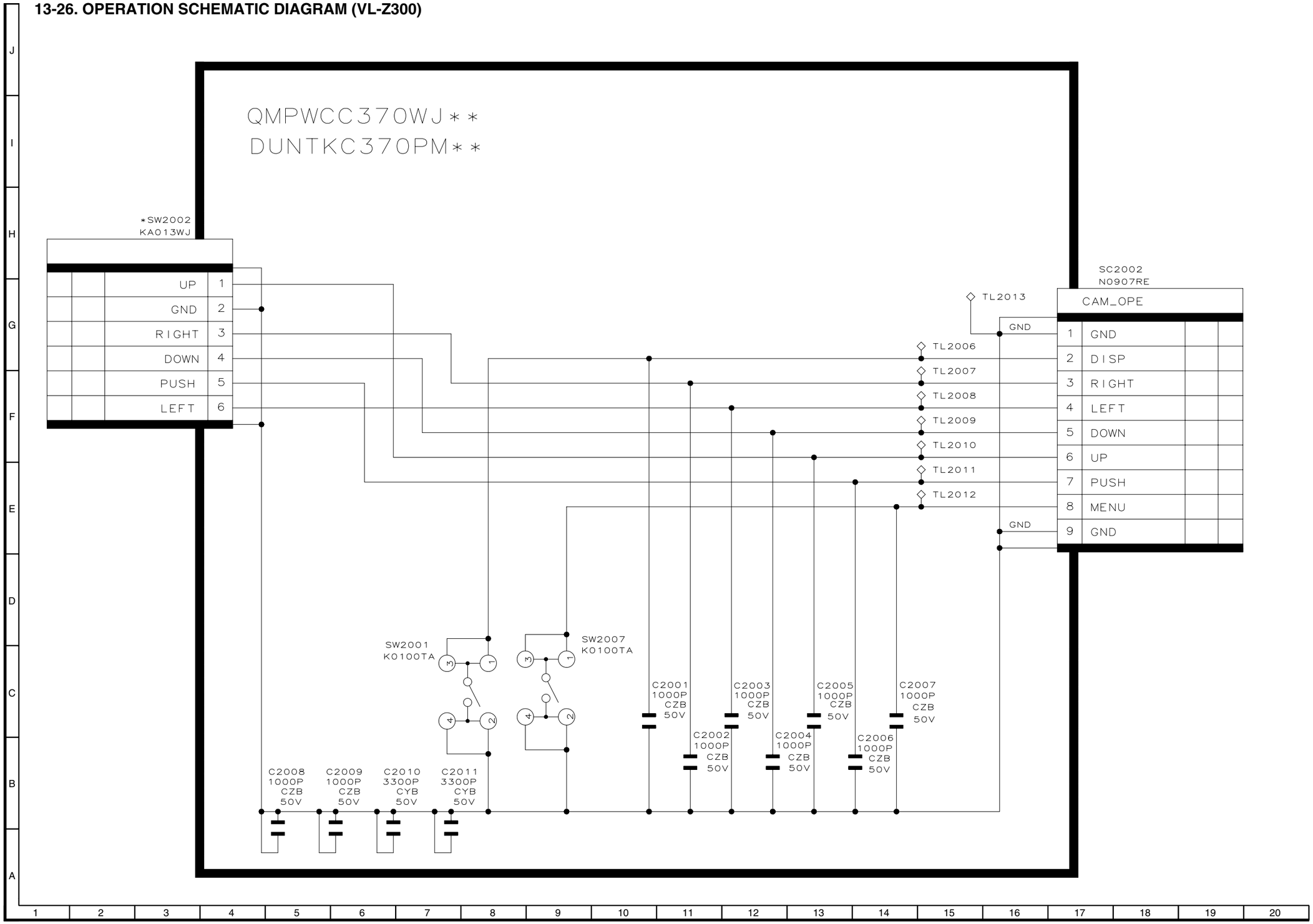
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-26. OPERATION SCHEMATIC DIAGRAM (VL-Z100)



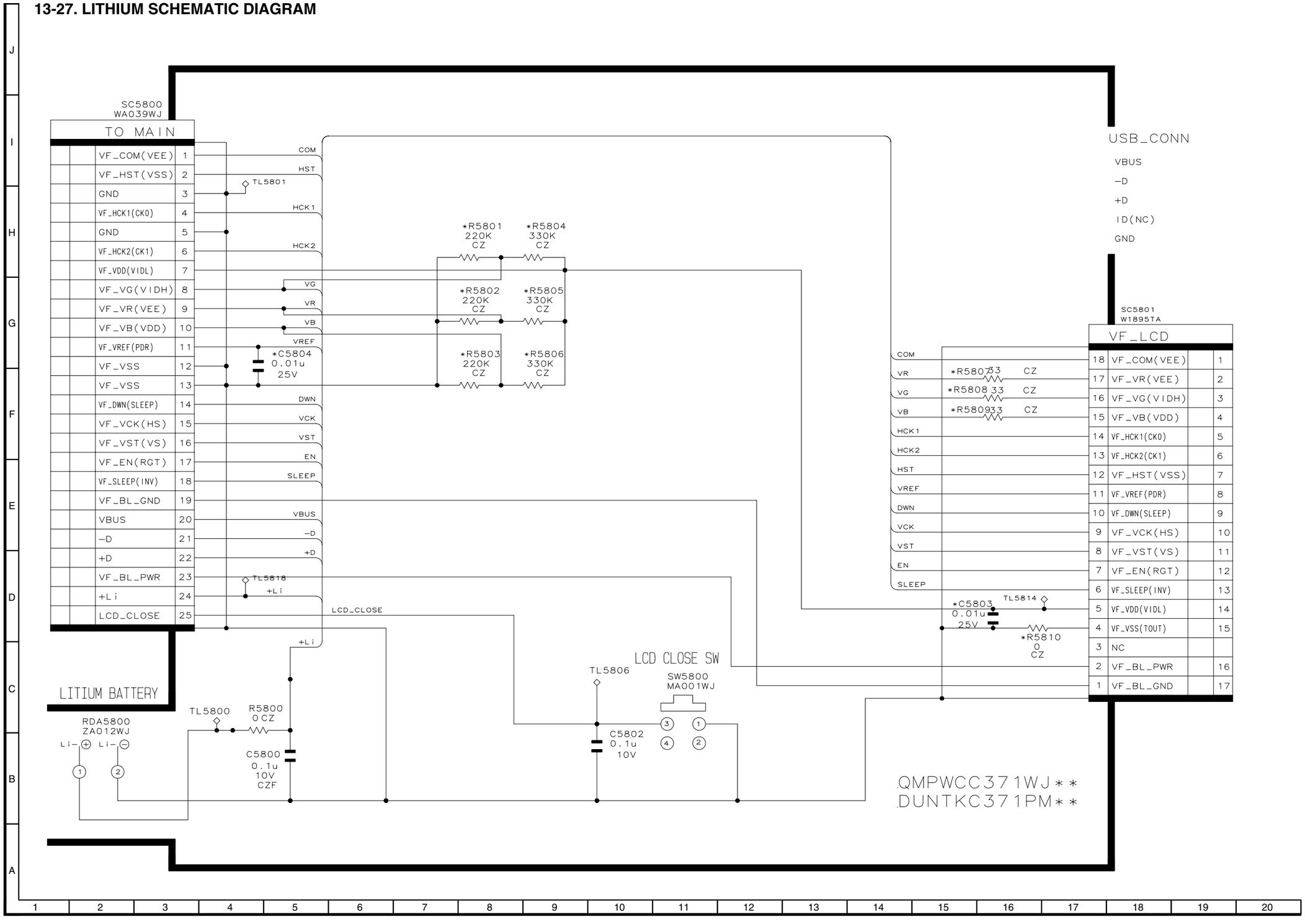
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-26. OPERATION SCHEMATIC DIAGRAM (VL-Z300)



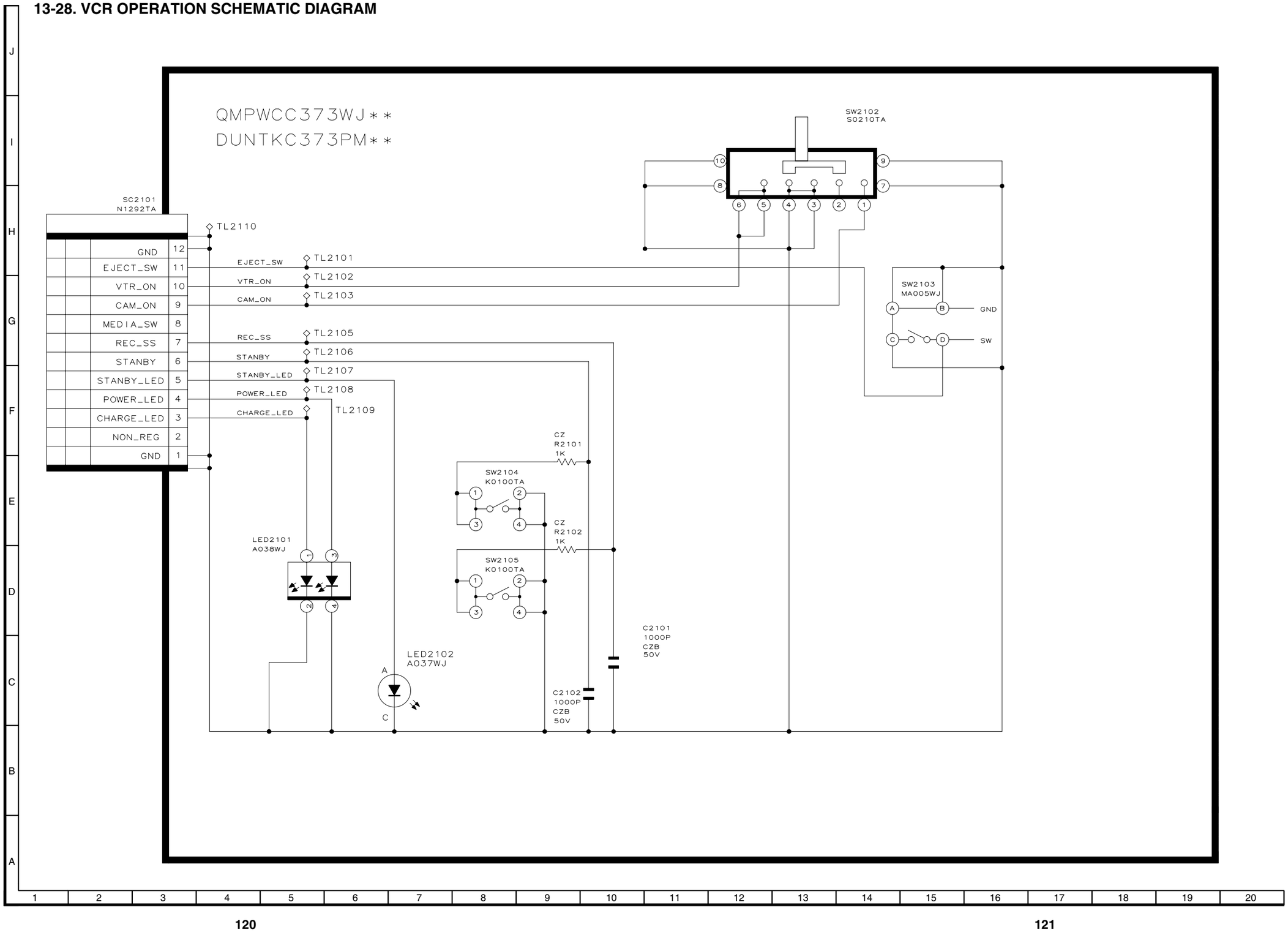
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-27. LITHIUM SCHEMATIC DIAGRAM



VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

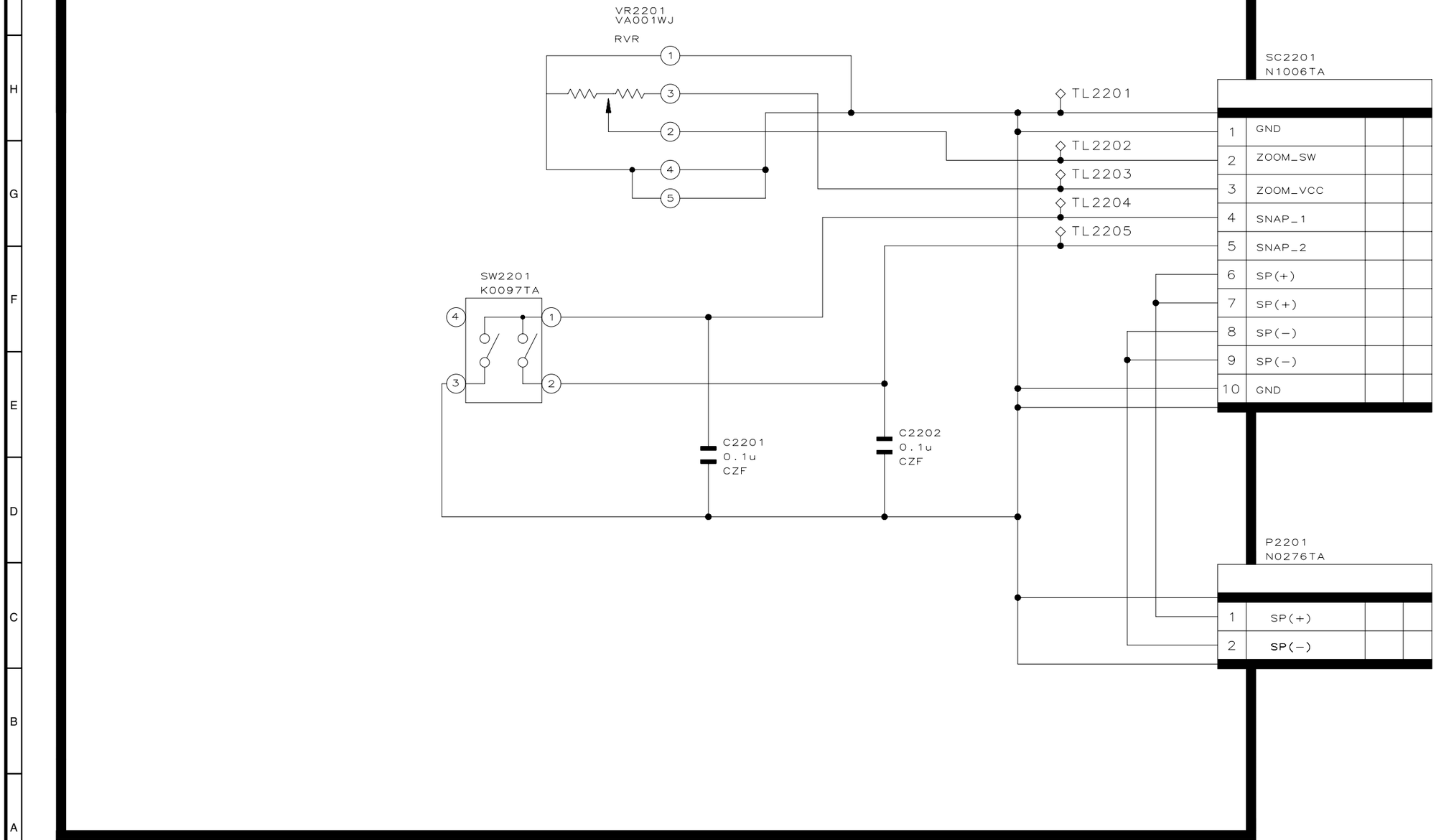
13-28. VCR OPERATION SCHEMATIC DIAGRAM



VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

13-29. ZOOM SW SCHEMATIC DIAGRAM

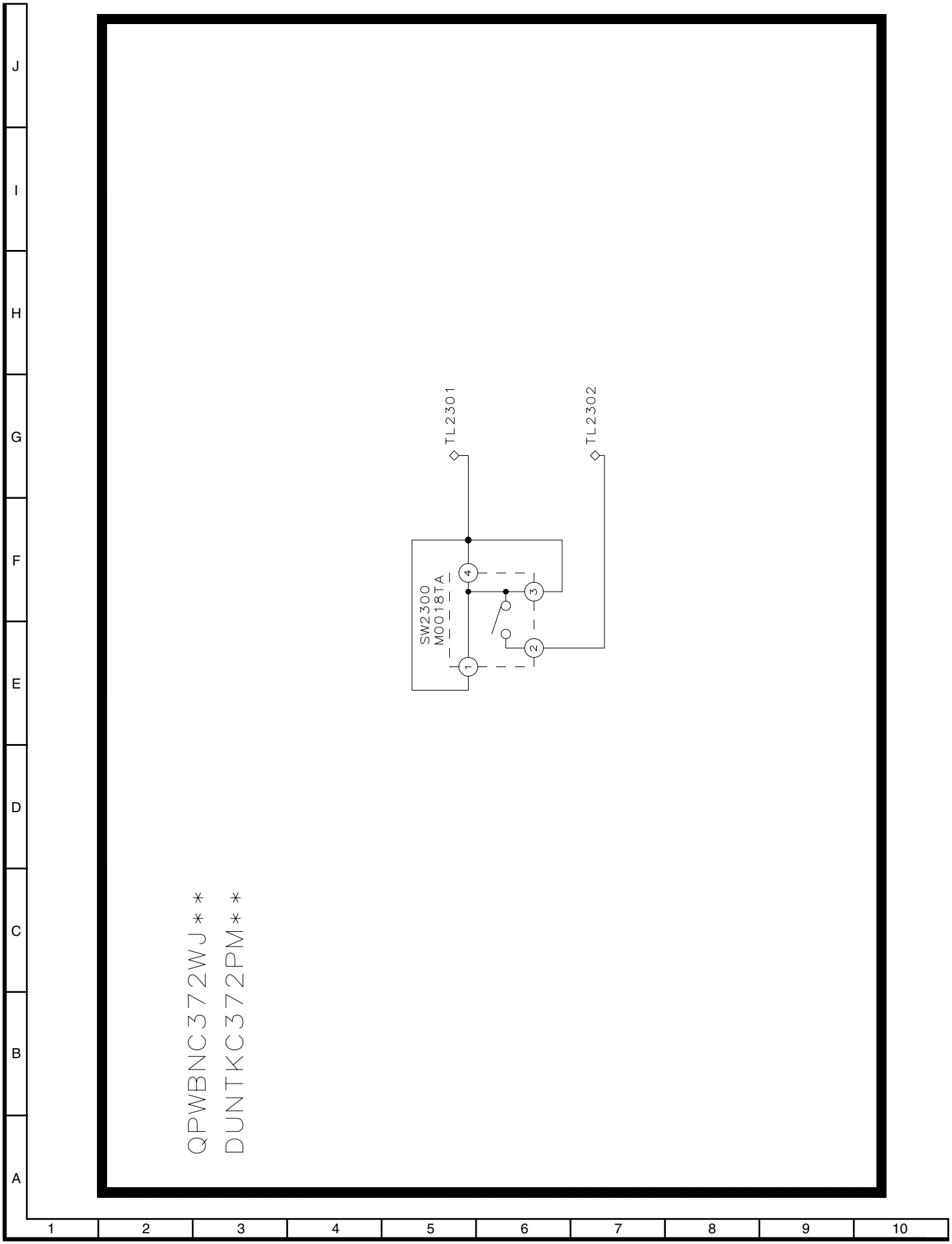
QMPWCC374WJ**
DUNTKC374PM**



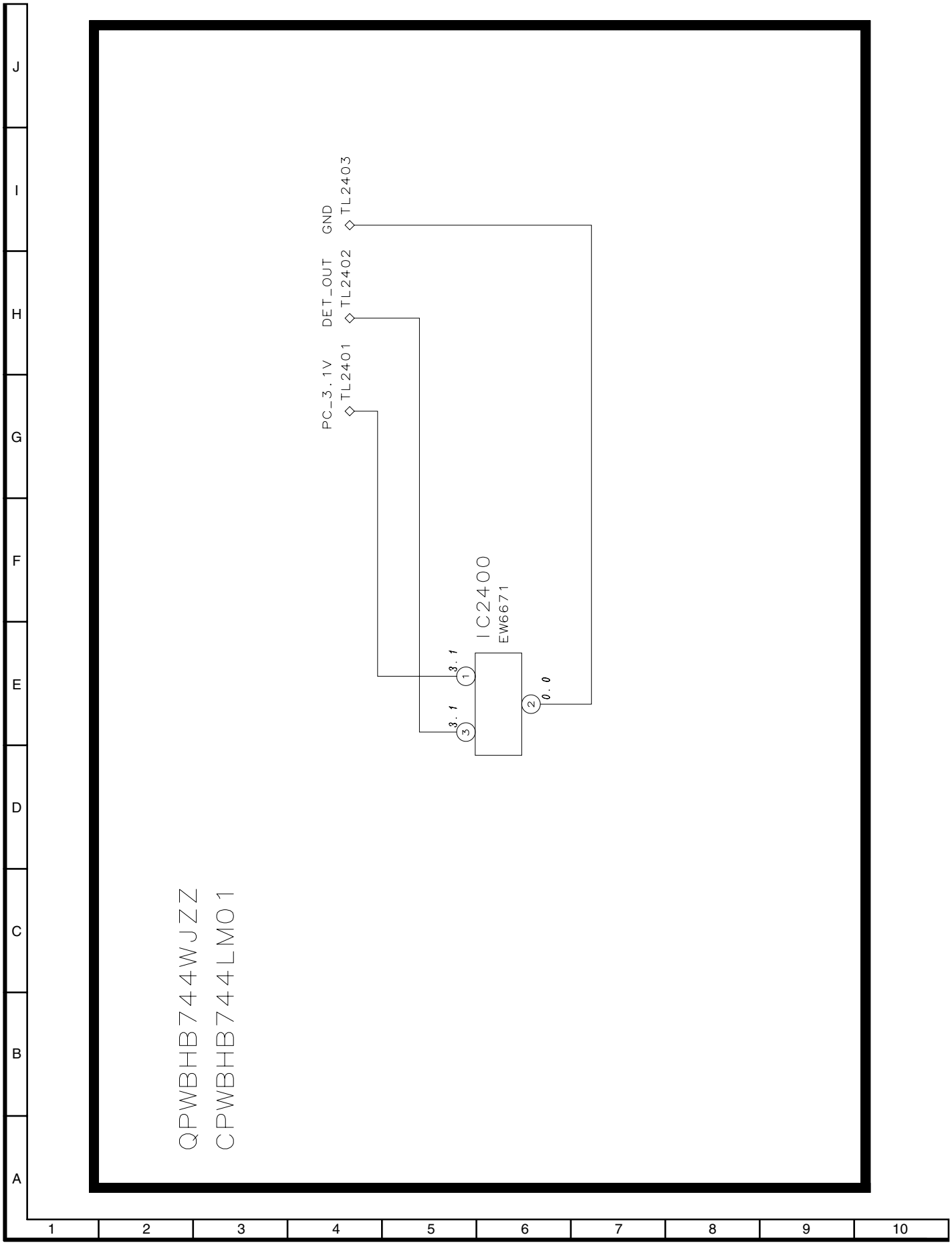
J I H G F E D C B A

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

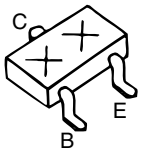
13-30. MECHA REVERSION DETECTION SCHEMATIC DIAGRAM



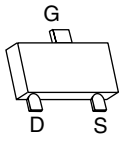
13-31. HOLE SENSOR UNIT SCHEMATIC DIAGRAM



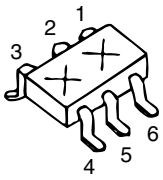
14. SEMICONDUCTOR LEAD IDENTIFICATION



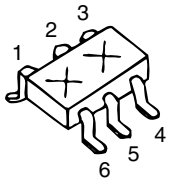
2SC4738Y
FMMT619
2SC5376B
12A01M
KRC401E
KRC402E
KRC404E
KTA2014EY
KTC4075EY
RT1N144U
15C01M
15C01SS
2SC5536
12A01SS



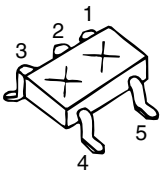
3LN01S



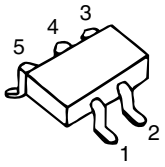
XP05534
7SB3157P
MCH6617
MCH6305
XP0431N
FDG312P
FDC642P
XP4316
EMD12
XP4501
XP6401
XP4313
XP4601
XP6501



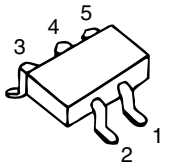
XN04391



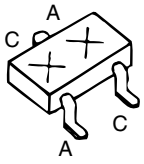
2SC4944Y
TA75S01F
NJM2107F
XP1111
XP1213
NJU7008F
XP1501
XP4213



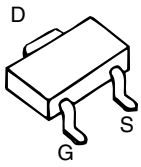
CPH5504



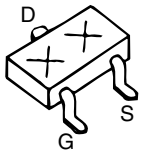
FMG12



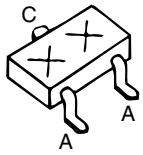
DAN217U



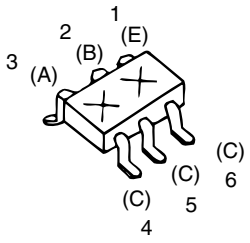
FDT458P



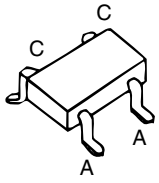
NDS332P
NDS355AN



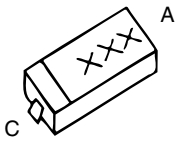
KDS121E



XN09D61

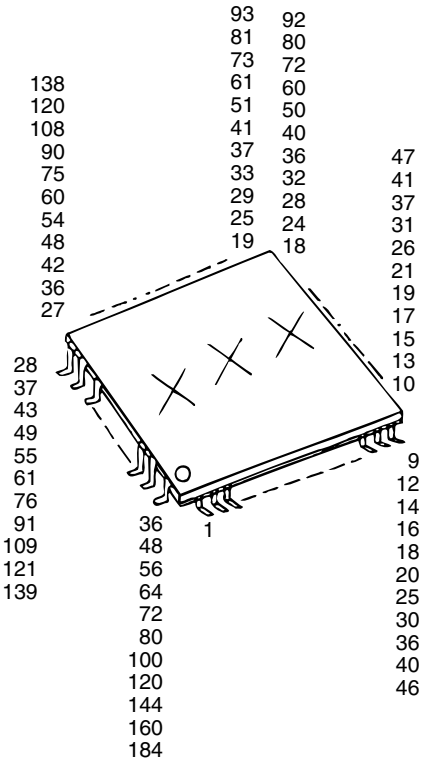


MA4S159



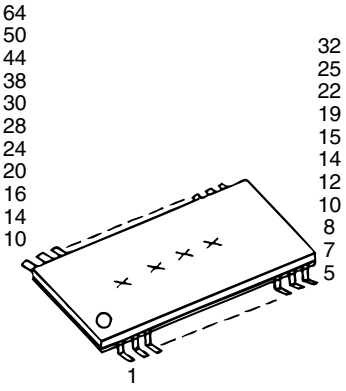
HVU17TRF
EX1394CE
RB160M30
A089WJ

HVC362
HVC375B
HVC202A
1SS400
MA2S304



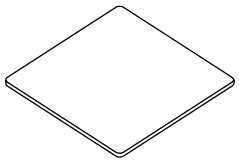
MB3881++
MN52A6CD
H49334HN

LA74206W
AN2901FQ
LA70050W
LA74212T
LC74130W



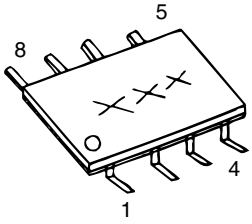
UPD16835
LV4051AT
MB8346BV
UPD16510
MM1323XV
MM1686XC

PCM3008
IXA883WJ
LA73070V
R2101S01
10324AFV
PT8146

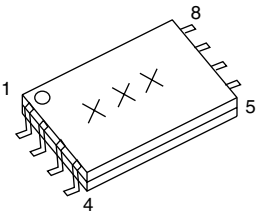


IX0809TA
IXA878WJ

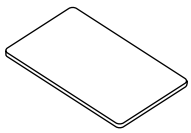
IXA879WJ
LB11993F
IXA815WJ



NJM2143R
BR24L64F



LMV358AU
NJM2535V
NC7NZ04K
NC7WZ08K
BR24L02M

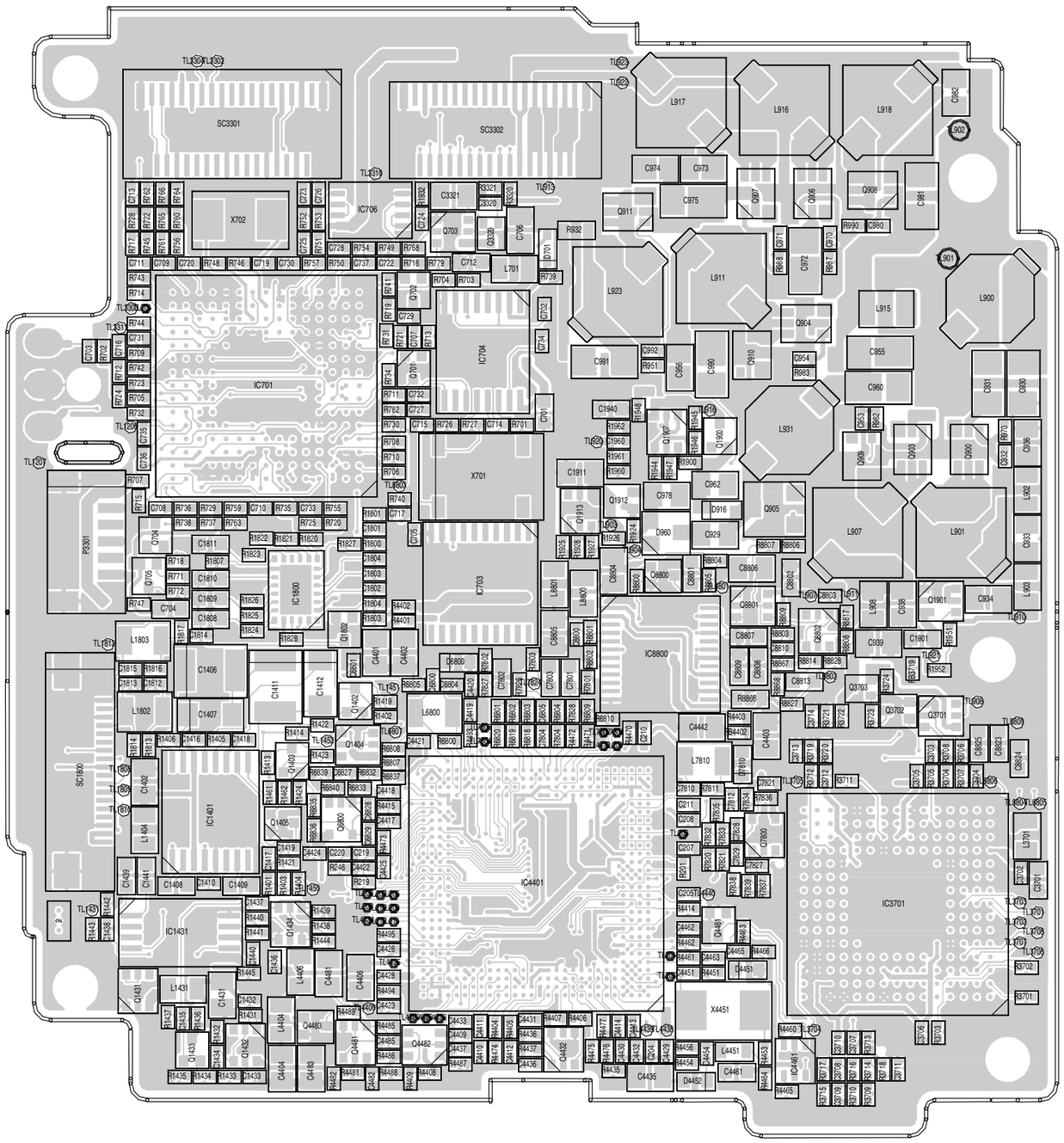


IXA550WJ

VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

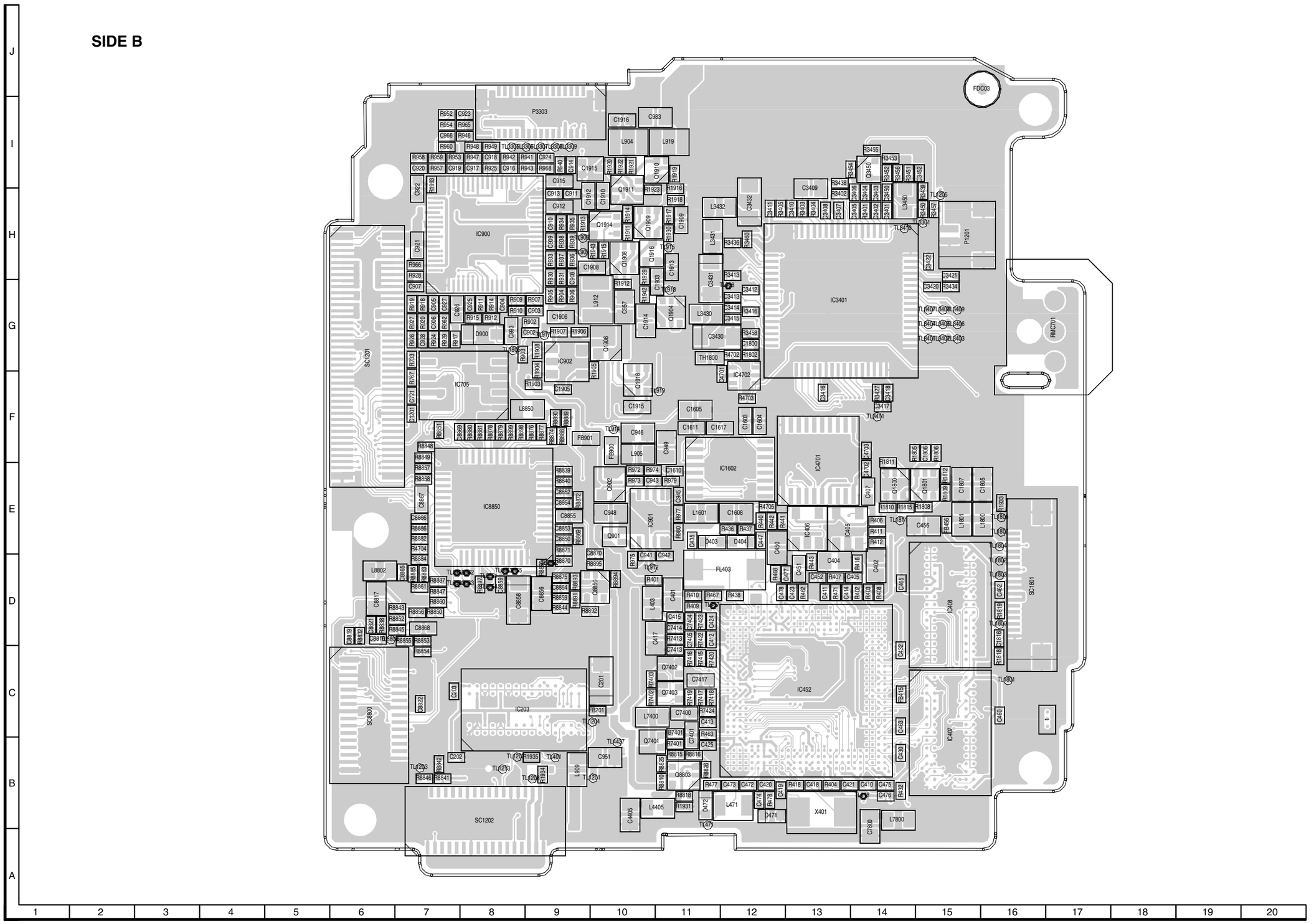
15. PRINTED WIRING BOARD ASSEMBLIES MAIN PWB

SIDE A



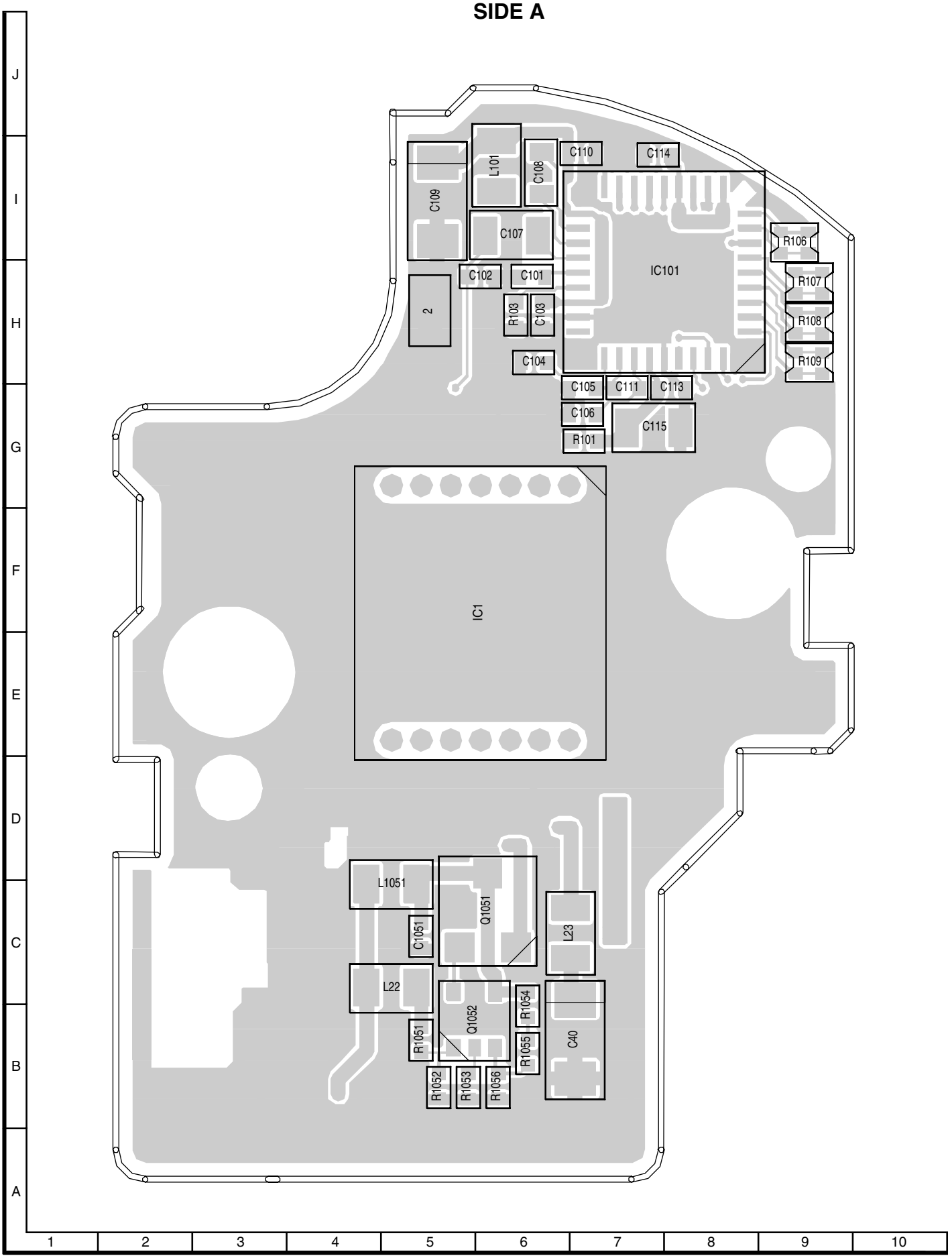
VL-Z100S-S/H-S/E-S
VL-Z300S-S/H-S/E-S

SIDE B

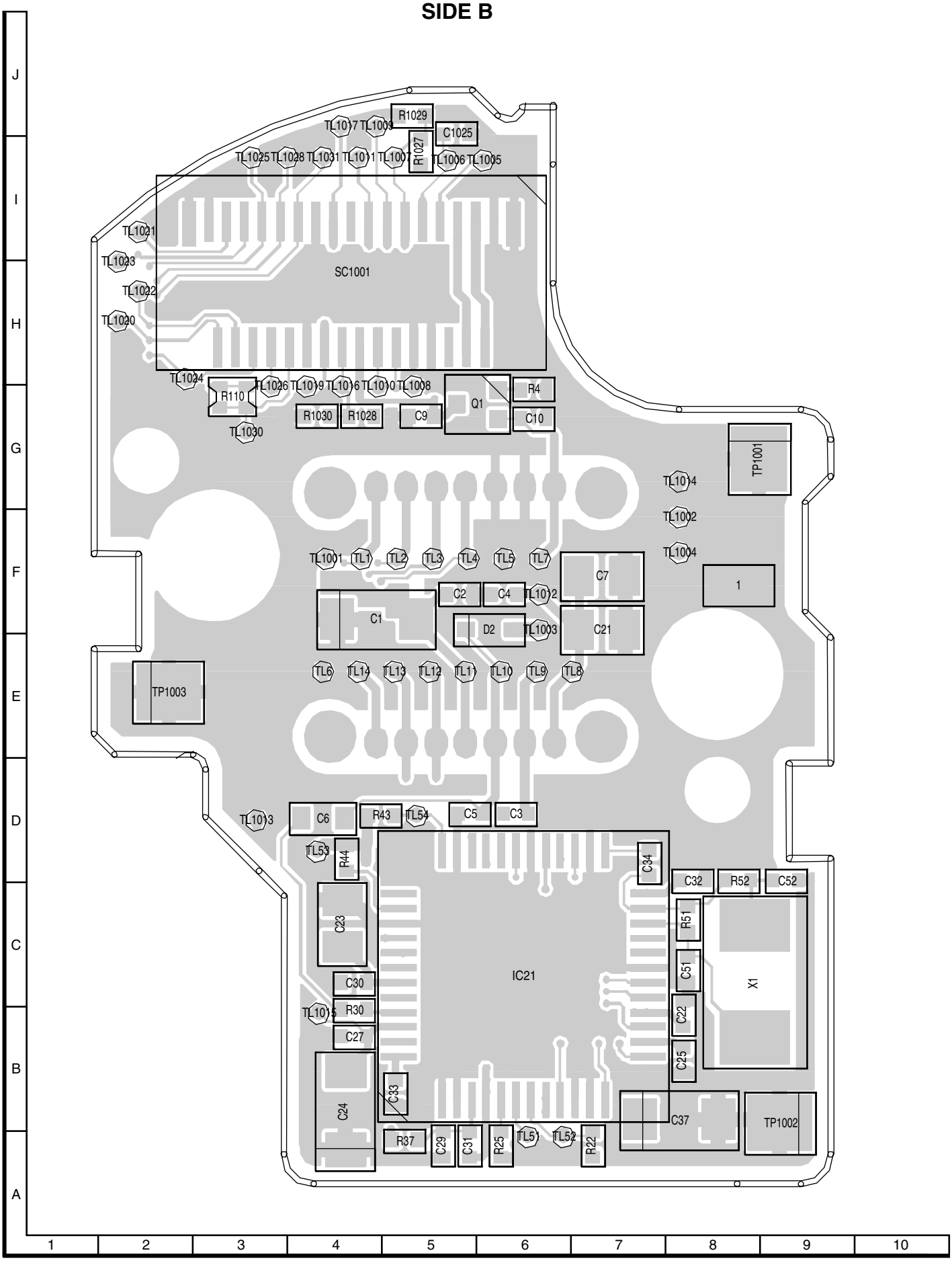

FDC03
P3303
IC900
IC3401
IC902
IC203
IC8850
IC1602
IC4701
IC452
IC407
IC1801
IC705
IC4702
IC1801
SC1201
SC8800
SC1202
SC1801
P1201
RMC701
X401
FL403
L8850
L8802
L7800
C7800
L1801
L1800
C456
C408
C404
C405
C406
C1801
C1807
C1805
C1800
C1801
C1916
C983
L904
L919
C3409
C3432
L3432
L3431
L3430
C3430
C3431
L3450
C3450
C1915
C1605
C1611
C1617
C1603
C1604
C1610
C1608
L1601
C946
C948
C949
C951
C901
C902
C945
L905
L909
FB901
FB900
C1906
C1907
C1908
C1909
C1914
C1904
C1903
C1913
C1912
C1910
C1911
C1915
C1916
C1918
C1919
C1917
C1909
C1908
C1906
C1905
C1904
C1903
C1902
C1901
C1900
C1914
C1913
C1912
C1911
C1910
C1909
C1908
C1907
C1906
C1905
C1904
C1903
C1902
C1901
C1900
C1919
C1918
C1917
C1916
C1915

CCD PWB

SIDE A

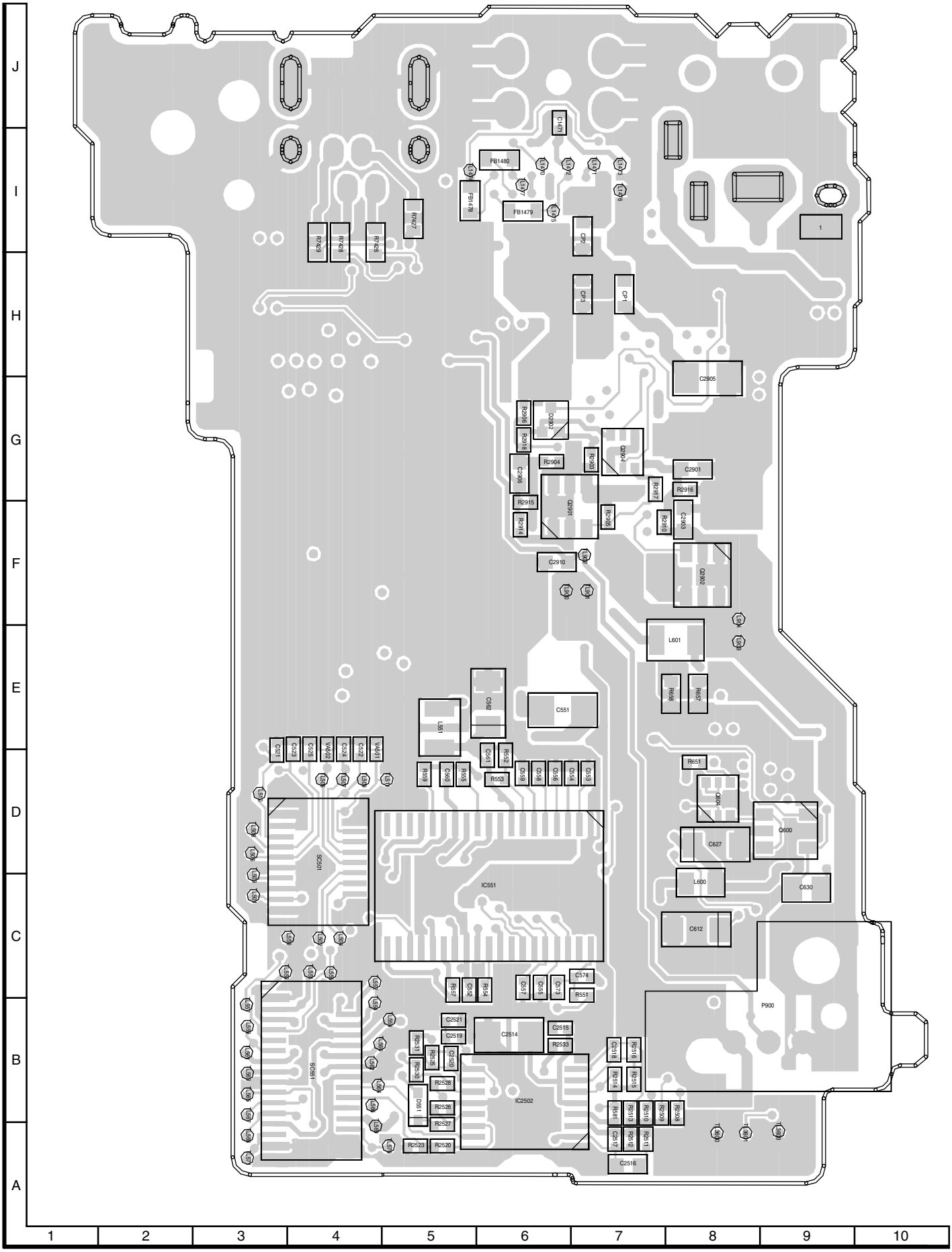


SIDE B

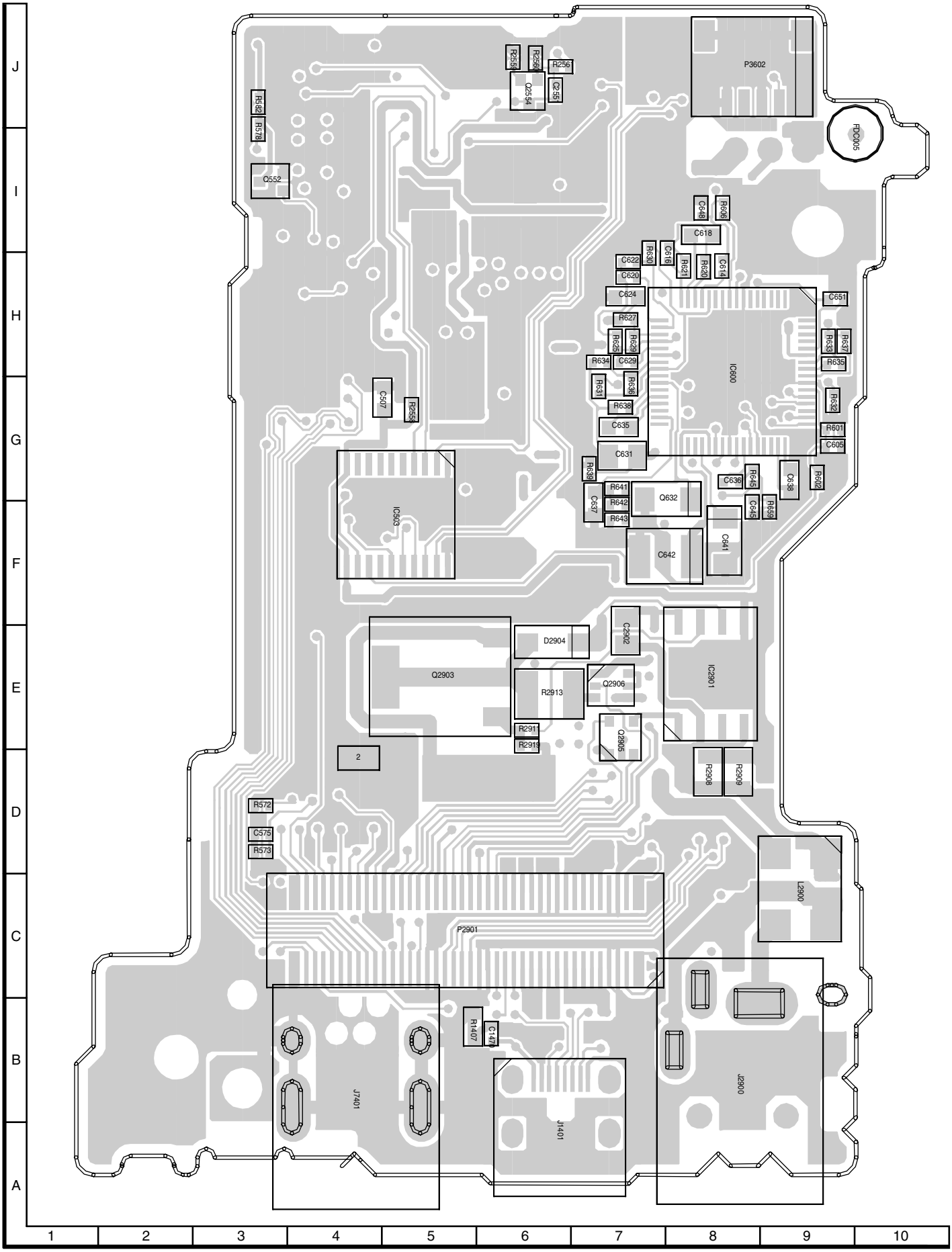

J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
R1029
C1025
R1027
TL1017
TL1009
TL1025
TL1028
TL1031
TL1011
TL1007
TL1006
TL1005
TL1021
TL1023
TL1022
TL1020
SC1001
TL1024
R110
TL1026
TL1019
TL1016
TL1010
TL1008
R1030
R1028
C9
Q1
R4
C10
TL1030
TP1001
TL1014
TL1002
TL1004
TL1001
TL1
TL2
TL3
TL4
TL5
TL7
C7
C2
C4
TL1012
C1
D2
TL1003
C21
1
TL6
TL14
TL13
TL12
TL11
TL10
TL9
TL8
TP1003
TL1013
C6
R43
TL54
C5
C3
TL53
R44
C34
C32
R52
C52
C23
R51
C51
IC21
X1
C30
TL1015
R30
C27
C22
C25
C24
C33
C37
TP1002
R37
C29
C31
R25
TL51
TL52
R22

SUB PWB

SIDE A

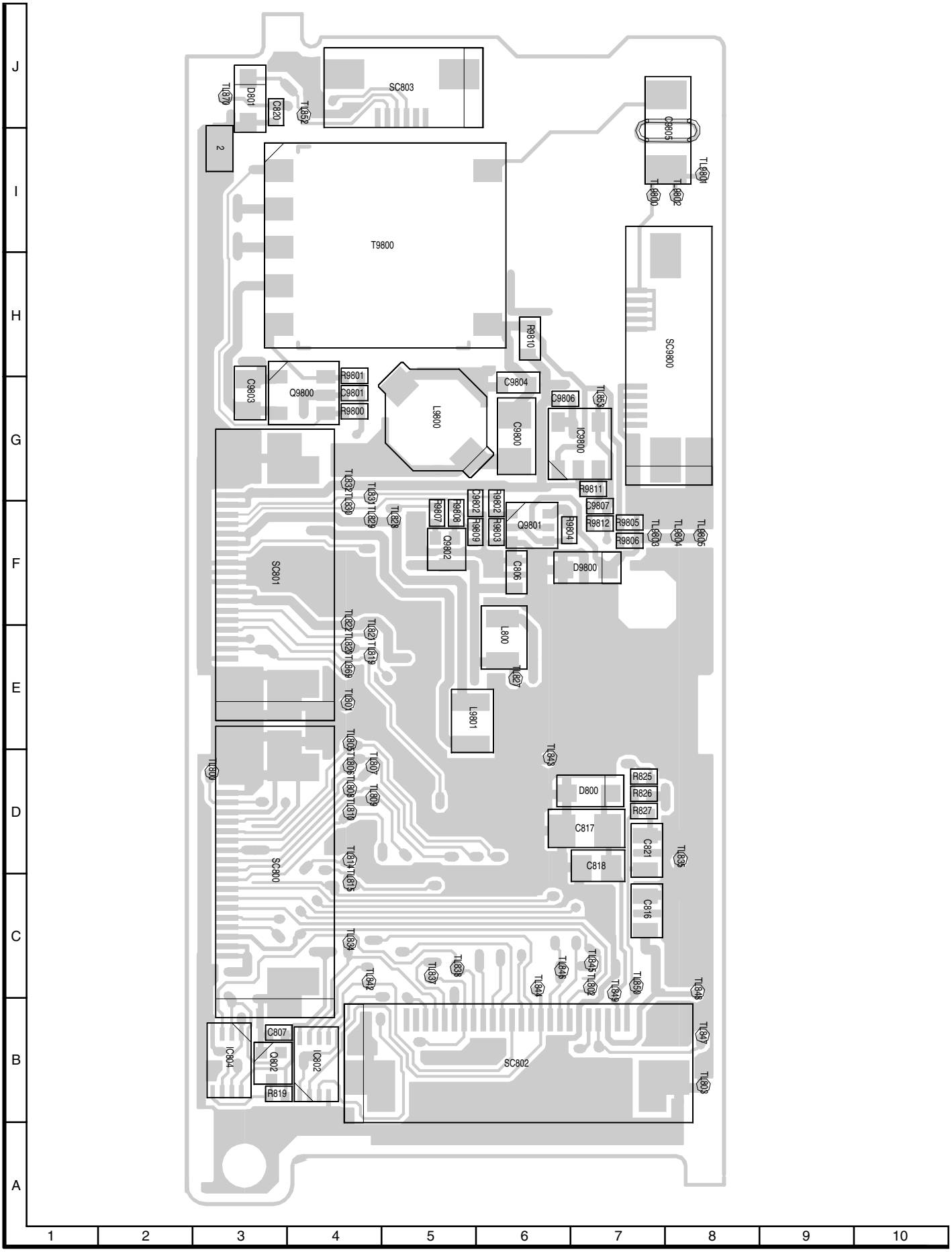


SIDE B


J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
P3602
FDC005
R2558
R2560
R256
C2554
C2557
R572
R578
Q552
C648
R606
C618
C622
R630
C616
R621
R620
C614
C620
C624
C651
R627
R633
R637
R635
R634
C629
R631
R636
R638
C635
C631
R632
R601
C605
C636
R645
C638
R602
R641
R642
R643
C637
Q632
C645
R659
C641
C642
IC600
C507
R2554
IC503
D2904
Q2902
Q2903
R2913
Q2906
IC2901
R2911
R2919
Q2905
R2908
R2909
2
R572
C575
R573
P2901
L2900
R1407
C1477
J7401
J1401
J2900

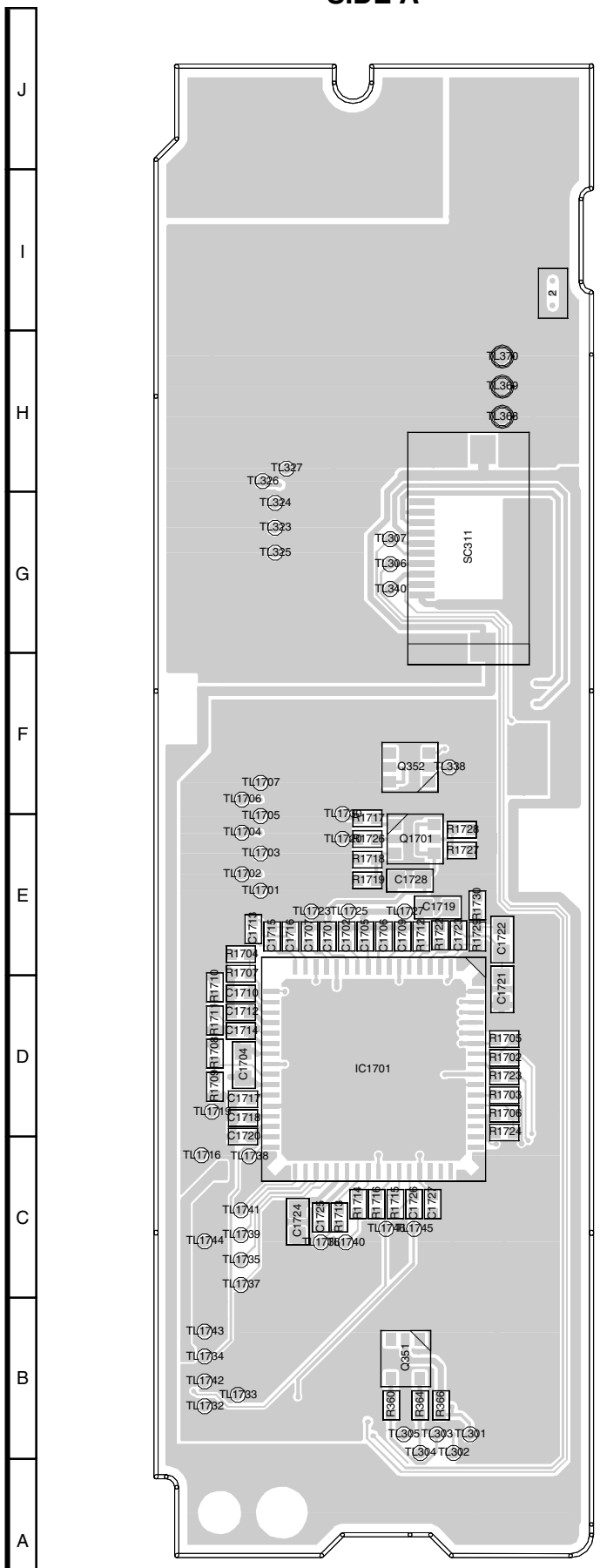
LCD PWB

SIDE A

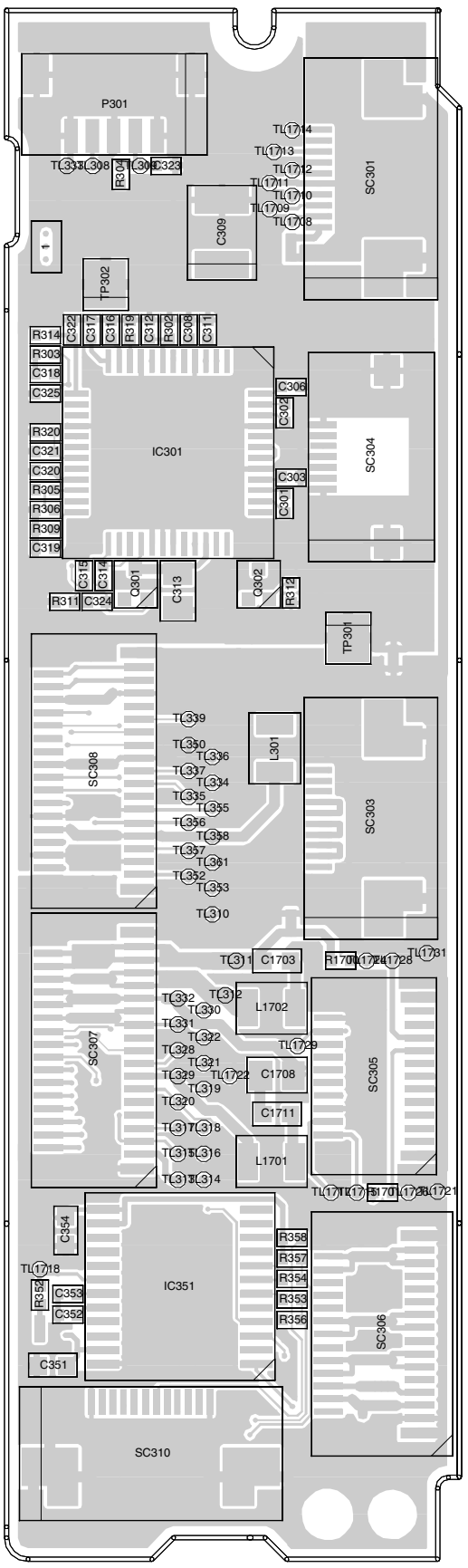


HEAD AMP PWB

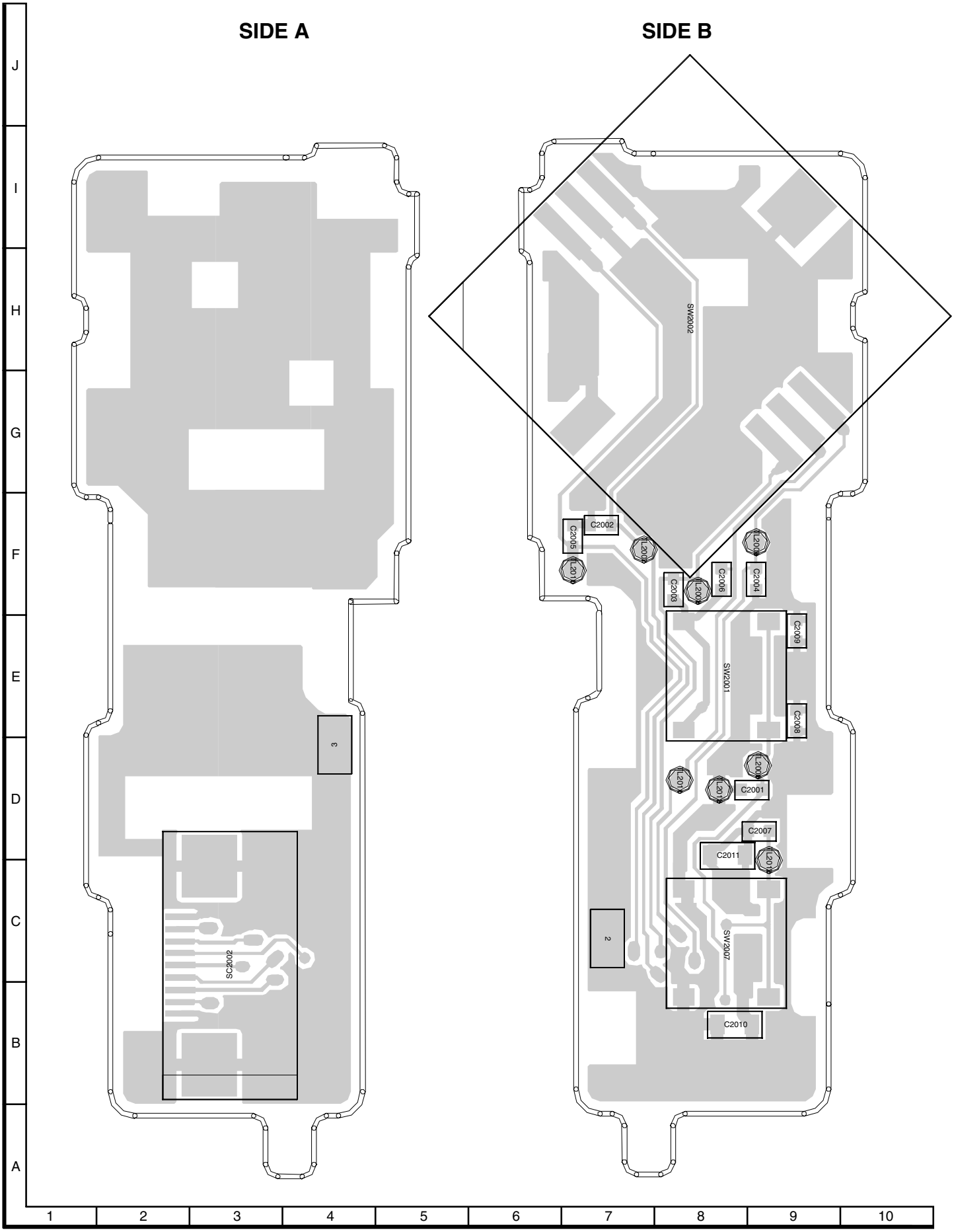
SIDE A



SIDE B

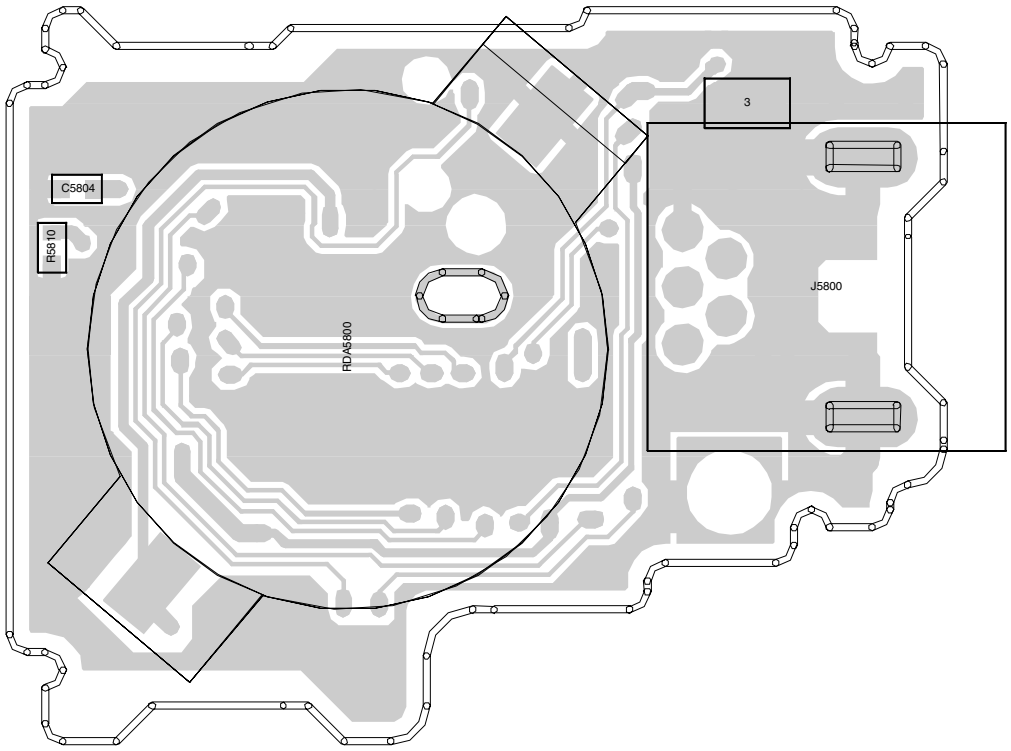


OPERATION PWB

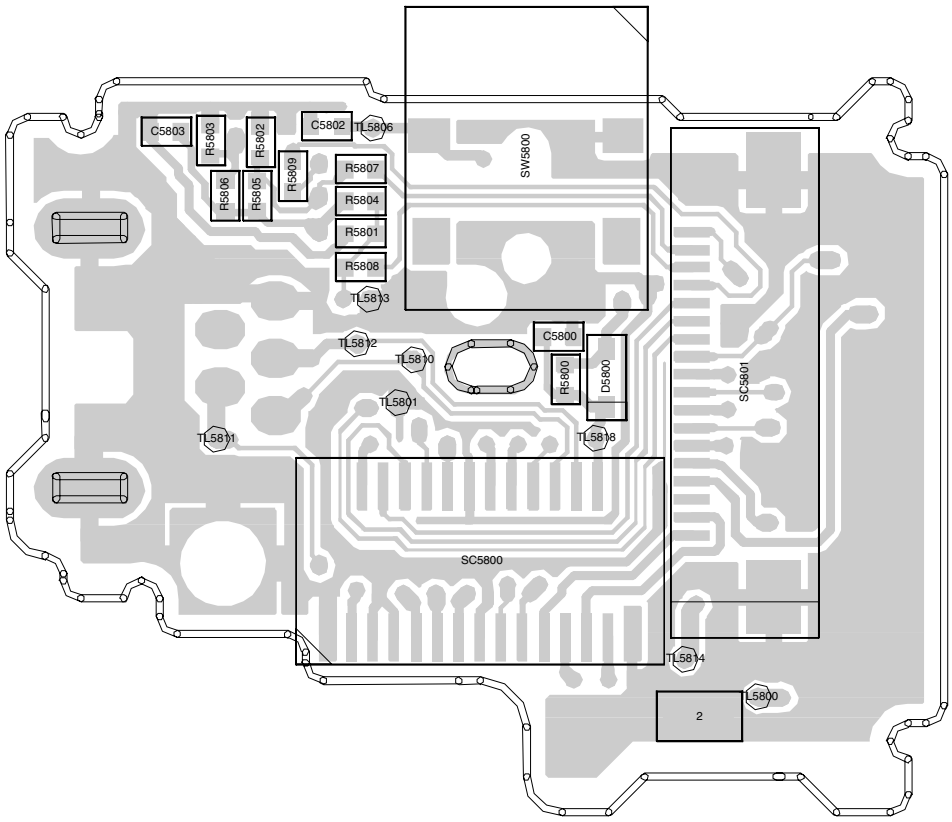


LITHIUM PWB

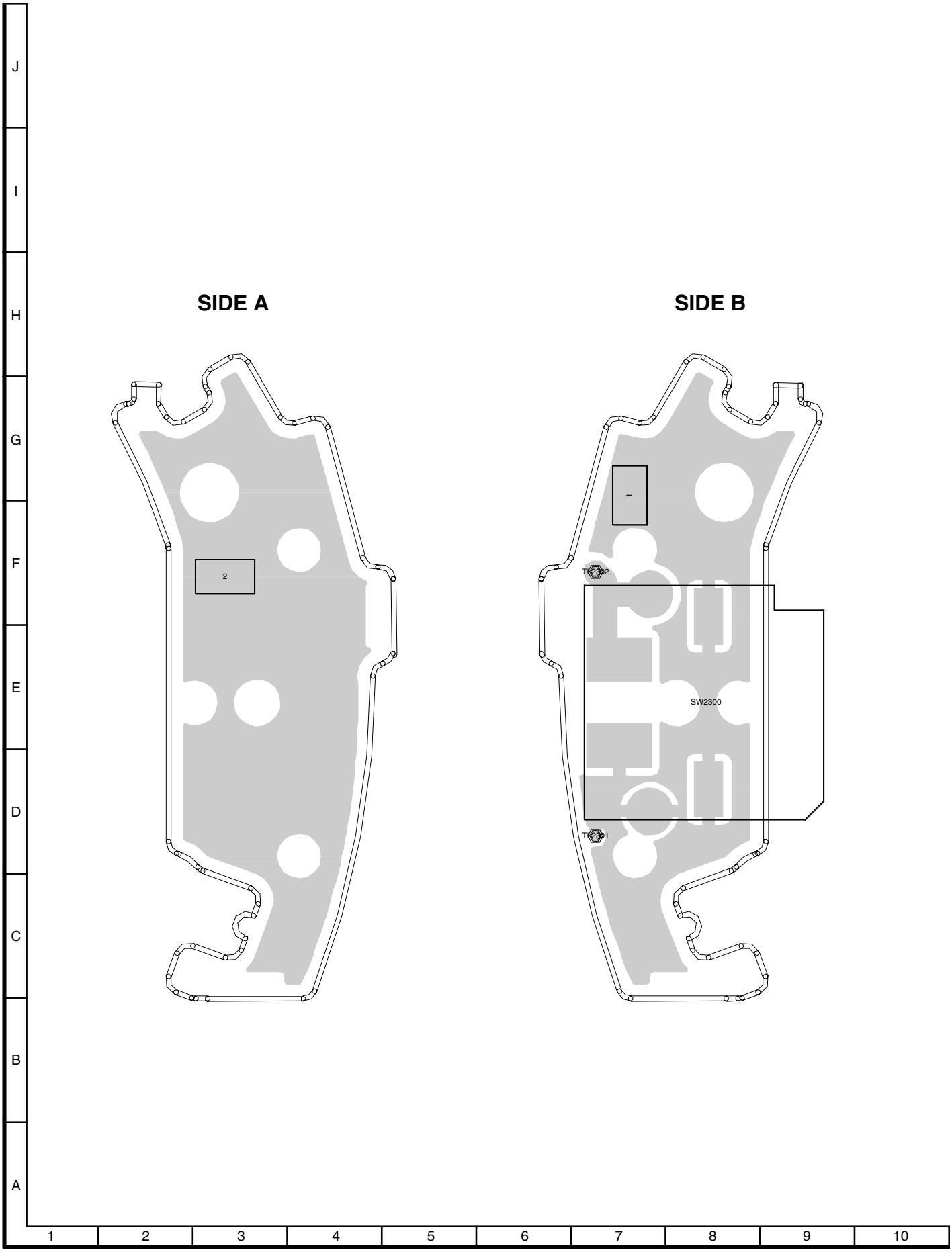
SIDE A



SIDE B

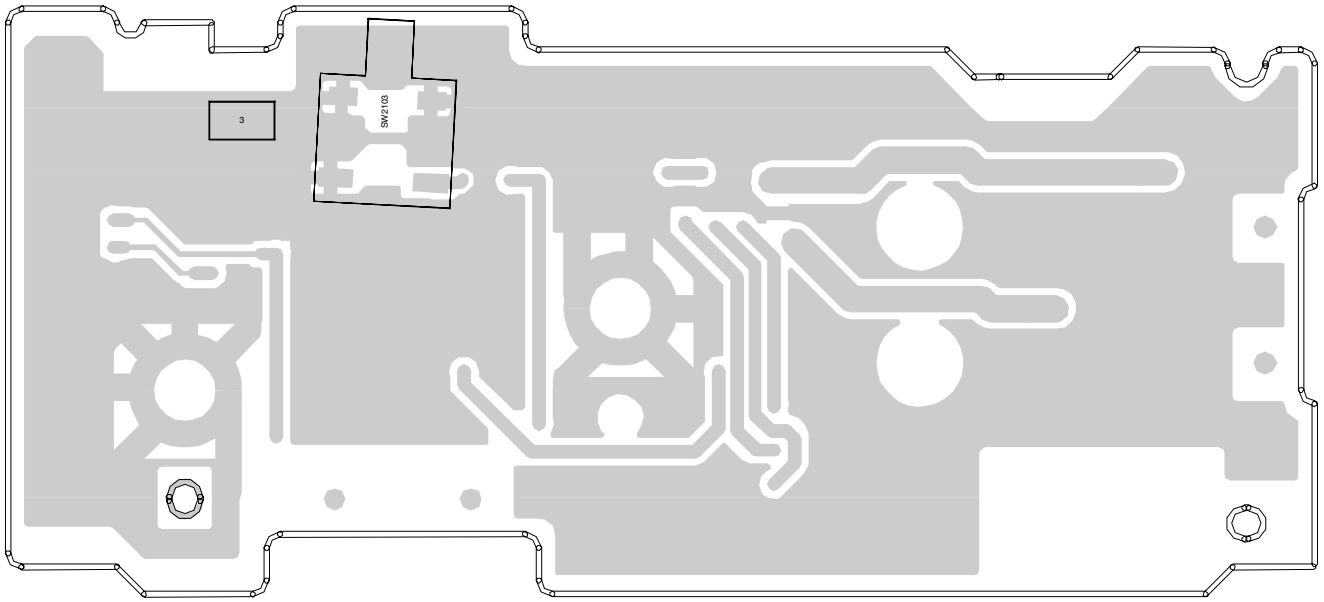


MECHA REVERSION DETECTION PWB

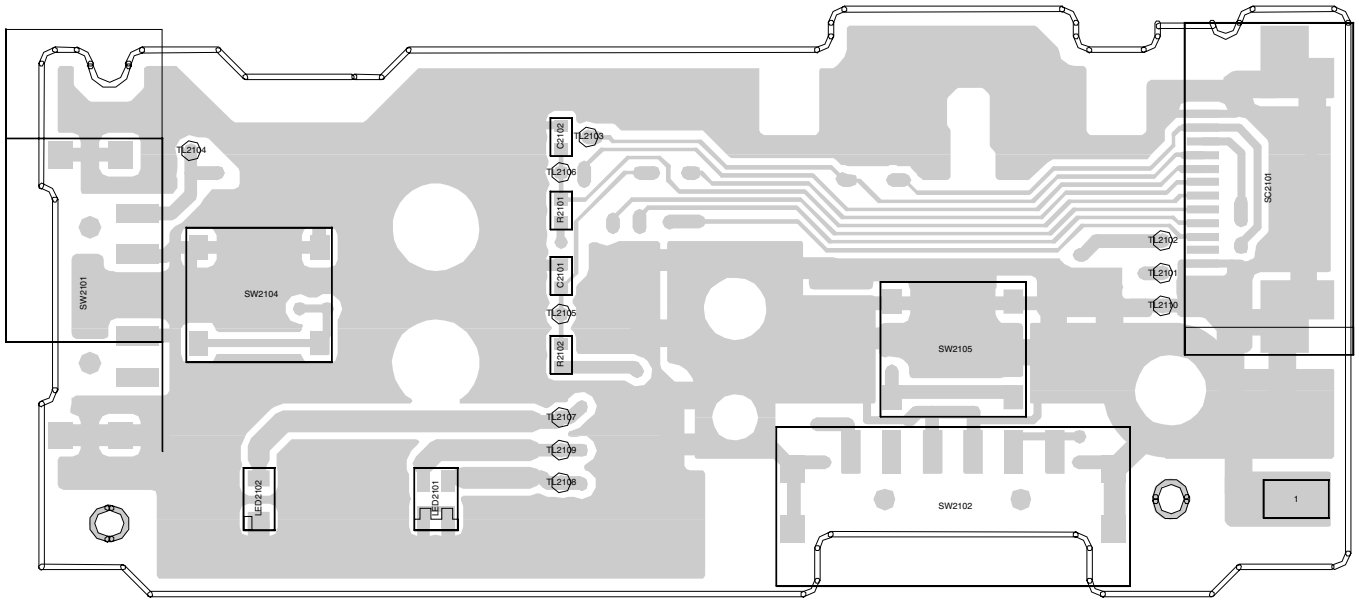


VCR OPERATION PWB

SIDE A



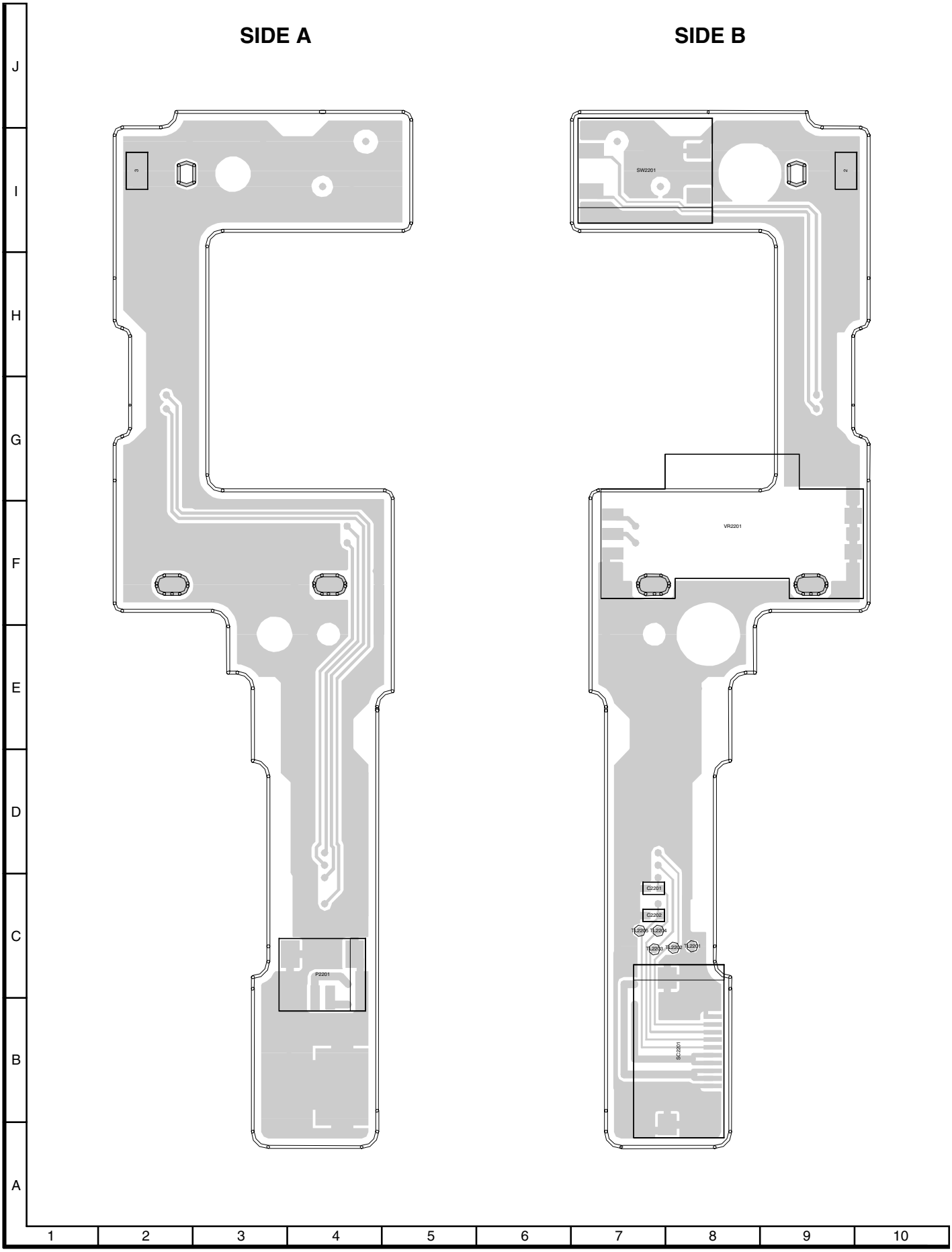
SIDE B



J I H G F E D C B A

1 2 3 4 5 6 7 8 9 10

ZOOM SW PWB


SIDE A
SIDE B
J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
P2201
SW2201
VR2201
C2201
C2202
SC2201

16. REPLACEMENT PARTS LIST/ EXPLODED VIEWS

ELECTRICAL PARTS LIST

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

" HOW TO ORDER REPLACEMENT PARTS "

★MARK : SPARE PARTS-DELIVERY SECTION:ALL JAPAN

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER **2. REF. NO.**
3. PART NO. **4. DESCRIPTION**
5. PRICE CODE

⚠ MARK: SAFETY RELATED PARTS

PWB ASSEMBLY IS NOT REPLACEMENT ITEM

Ref. No.	Part No.	★	Description	Code

PRINTED WIRING BOARD ASSEMBLIES *(NOT REPLACEMENT ITEM)*

	DUNTKC364QA50		MAIN PWB Unit (VL-Z300S-S/S-S(AS)) –
	DUNTKC364QA51		MAIN PWB Unit (VL-Z300S-S(RS)) –
	DUNTKC364QA52		MAIN PWB Unit (VL-Z300E-S/E-S(WS)) –
	DUNTKC364QA53		MAIN PWB Unit (VL-Z300H-S) –
	DUNTKC364QA55		MAIN PWB Unit (VL-Z100S-S) –
	DUNTKC364QA56		MAIN PWB Unit (VL-Z100S-S(RS)) –
	DUNTKC364QA57		MAIN PWB Unit (VL-Z100E-S/E-S(XS)) –
	DUNTKC364QA58		MAIN PWB Unit (VL-Z100H-S) –
	DUNTKC366QA50		CCD PWB Unit –
	DUNTKC368QA50		SUB PWB Unit (VL-Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS)) –
	DUNTKC368QA51		SUB PWB Unit (VL-Z100S-S/S-S(RS)/H-S/E-S/E-S(XS)) –
	DUNTKC118QA01		LCD PWB Unit –
	DUNTKC369QA00		HEAD AMP PWB Unit –
	DUNTKC370PM00		OPERATION PWB Unit (VL-Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS)) –
	DUNTKC370PM01		OPERATION PWB Unit (VL-Z100S-S/S-S(RS)/H-S/E-S/E-S(XS)) –
	DUNTKC371PM01		LITHIUM PWB Unit –
	DUNTKC372PM00		MECHA REVERSION DETECTION PWB Unit –
	DUNTKC373PM02		VCR OPERATION PWB Unit –
	DUNTKC374PM00		ZOOM SW PWB Unit –

Ref. No.	Part No.	★	Description	Code

DUNTKC364QA50(VL-Z300S-S/S-S(AS))
DUNTKC364QA51(VL-Z300S-S(RS))
DUNTKC364QA52(VL-Z300E-S/E-S(WS))
DUNTKC364QA53(VL-Z300H-S)
DUNTKC364QA55(VL-Z100S-S)
DUNTKC364QA56(VL-Z100S-S(RS))
DUNTKC364QA57(VL-Z100E-S/E-S(XS))
DUNTKC364QA58(VL-Z100H-S)
MAIN PWB UNIT

INTEGRATED CIRCUITS

IC203	RH-iXA550WJZZY	IXA550WJ, Codec External Memory	AU
IC405	VHiLMV321AS-1Y	LMV321AS, DC Amp	AE
IC406	VHiLMV321AS-1Y	LMV321AS, DC Amp (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AE
IC407	RH-iXA550WJZZY	IXA550WJ, Codec External Memory	AU
IC408	RH-iXA550WJZZY	IXA550WJ, ECC External Memory	AU
IC452	RH-iX0809TAZZQ	IX0809TA, Codec/ECC/PCM/CLK,Gen/DIF	BM
IC701	RH-iXA878WJZZQ	IXA878WJ, Mec/System Micon	BB
IC703	RH-iXA883WJZZY	IXA883WJ, Character Generator	AM
IC704	VHiR2101S01-1Y	R2101S01	AH
IC705	VHiBR24L64F-1Y	BR24L64F, E²PROM	AK
IC706	VHiNJM2143R-1Y	NJM2143R	AE
IC900	VHiMB3881++-1Y	MB3881++, Power_CTL	AT
IC901	VHiNJM2143R-1Y	NJM2143R, 2.8V/2.5V Reg	AE
IC902	VHiTA75S01F-1Y	TA75S01F	AD
IC1401	VHiLA73070V-1Y	LA73070V, Video Out	AK
IC1431	VHiNJM2535V-1Y	NJM2535V, Video In SW (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AE
IC1602	VHiPCM3008+-1Y	PCM3008+, 16 Bit ADC/DAC	AN
IC1800	VHiMM1686XC-1Y	MM1686XC, LCD Interface	AR
IC3401	VHiLC74130W-1Y	LC74130W	AZ
IC3701	RH-iXA894WJZZQ	IXA894WJ, Mec/System Micon	AZ
IC4401	RH-iXA815WJZZQ	IXA815WJ	BG
IC4461	VHi7SB3157P-1Y	7SB3157P (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AE
IC4701	VHiMB8346BV-1Y	MB8346BV	AN
IC8800	VHiMM1323XV-1Y	MM1323XV, VF Interface	AN

TRANSISTORS

Q701	VSRT1N144U/-1Y	RT1N144U	AB
Q702	VSKTA2014EY-1Y	KTA2014EY	AB
Q704	VSKTA2014EY-1Y	KTA2014EY	AB
Q705	VSKTA2014EY-1Y	KTA2014EY	AB
Q900	VSMCH6731++-1Y	MCH6731++	AD
Q901	VS15C01SS++-1Y	15C01SS++	AC
Q902	VS12A01M+++-1Y	12A01M+++	AC
Q903	VSMCH6731++-1Y	MCH6731++	AD
Q904	VSMCH6731++-1Y	MCH6731++	AD
Q905	VSFMMT619//-1Y	FMMT619	AE
Q906	VSMCH6731++-1Y	MCH6731++	AD
Q907	VSMCH6731++-1Y	MCH6731++	AD
Q908	VSMCH6731++-1Y	MCH6731++	AD
Q911	VSMCH6731++-1Y	MCH6731++	AD
Q1402	VS2SC5376B+-1Y	2SC5376B+ (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AC
Q1403	VS2SC5376B+-1Y	2SC5376B+ (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AC
Q1404	VSKRX203U++-1Y	KRX203U++ (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AB

Ref. No.	Part No.	★	Description	Code
Q1405	VS2SC5376B+-1Y		2SC5376B+ (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AC
Q1431	VSXP0431N++-1Y		XP0431N++ (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AB
Q1432	VSKTX101UY+-1Y		KTX101UY+ (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AB
Q1433	VSKTC4075EY-1Y		KTC4075EY (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AB
Q1434	VSXP6401///-1Y		XP6401 (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AC
Q1800	VSKTX101UY+-1Y		KTX101UY+	AB
Q1801	VSKTX101UY+-1Y		KTX101UY+	AB
Q1802	VSKRC404E++-1Y		KRC404E++	AB
Q1901	VSXP4316///-1Y		XP4316	AC
Q1904	VSKRX203U++-1Y		KRX203U++	AB
Q1906	VS12A01M+++-1Y		12A01M+++	AC
Q1908	VSKTA701UY+-1Y		KTA701UY+	AB
Q1909	VSKTC801UY+-1Y		KTC801UY+	AC
Q1910	VS2SA1989R/-1Y		2SA1989R	AB
Q1911	VSKTC801UY+-1Y		KTC801UY+	AC
Q1912	VSKTC4075EY-1Y		KTC4075EY	AB
Q1913	VSXP6401///-1Y		XP6401	AC
Q1914	VSKTC801UY+-1Y		KTC801UY+	AC
Q1915	VSKRC404E++-1Y		KRC404E++	AB
Q1916	VSKTC4075EY-1Y		KTC4075EY	AB
Q1918	VSKRX203U++-1Y		KRX203U++	AB
Q3320	VS15C01SS++-1Y		15C01SS++	AC
Q3702	VSKRC401E++-1Y		KRC401E++	AB
Q3703	VS12A01SS++-1Y		12A01SS++	AC
Q4432	VSXP6401///-1Y		XP6401	AC
Q4461	VSKRC404E++-1Y		KRC404E++ (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AB
Q4481	VSKTX101UY+-1Y		KTX101UY+	AB
Q4482	VSKTX101UY+-1Y		KTX101UY+	AB
Q4483	VSKRC404E++-1Y		KRC404E++ (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AB
Q6800	VSKTC601UY+-1Y		KTC601UY+	AC
Q7401	VSKTC4075EY-1Y		KTC4075EY	AB
Q7402	VSKRC404E++-1Y		KRC404E++	AB
Q7403	VSKTC4075EY-1Y		KTC4075EY	AB
Q7800	VSKTC601UY+-1Y		KTC601UY+	AC
Q8800	VS3LN01S///-1Y		3LN01S	AC
Q8801	VSKTX101UY+-1Y		KTX101UY+	AB
Q8802	VSKTX101UY+-1Y		KTX101UY+	AB
Q8803	VSKTX101UY+-1Y		KTX101UY+	AB

DIODES

Ref. No.	Part No.	★	Description	Code
D403	VHDHVC362//-1Y		HVC362 (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AD
D404	VHDHVC362//-1Y		HVC362 (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AD
D471	VHDHVC362//-1Y		HVC362	AD
D472	VHCMA2S304+-1Y		CMA2S304+	AC
D701	VHD1SS400++-1Y		1SS400++	AB
D900	RH-EX1394CEZZY		Zener Diode, EX1394CE	AB
D916	VHD1SS400++-1Y		1SS400++	AB
D960	VHDDAN217U+-1Y		DAN217U+	AB
D4451	VHDHVC375B+-1Y		HVC375B+	AD
D4452	VHDHVC375B+-1Y		HVC375B+	AD
D6800	VHDHVC202A+-1Y		HVC202A+	AC
D7810	VHDHVC202A+-1Y		HVC202A+	AC

PACKAGED CIRCUITS

Ref. No.	Part No.	★	Description	Code
X401	RCRSC0160TAZZY		Crystal, CRSC0160TA	AH
X701	RCRSCA054WJZZY		Crystal, CRSCA054WJ	AE
X702	RCRSC0189TAZZY		Crystal, CRSC0189TA	AK
X4451	RCRSCA048WJZZY		Crystal, CRSCA048WJ	AH

COILS

Ref. No.	Part No.	★	Description	Code
FL403	RFiLC0164TAZZY		Filter (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AG
L403	VPCEM4R7MR40NY		Peaking, 4.7µH	AC
L471	VPD9M8R2J2R0NY		Peaking, 8.2µH	AC
L701	VPCEM100MR70NY		Peaking, 10µH	AC
L900	RCiLPA139WJZZY		Coil, 22µH	AD
L901	RCiLPA010WJZZY		Coil, 15µH	AD
L902	VPCEM2R2MR23NY		Peaking, 2.2µH	AC
L903	VPCEM2R2MR23NY		Peaking, 2.2µH	AC
L904	VPCLN2R2MR13NY		Peaking, 2.2µH	AB
L905	VPCEM2R2MR23NY		Peaking, 2.2µH	AC
L907	RCiLPA010WJZZY		Coil, 15µH	AD
L908	VPCEM2R2MR23NY		Peaking, 2.2µH	AC
L909	VPCEM2R2MR23NY		Peaking, 2.2µH	AC
L911	RCiLPA010WJZZY		Coil, 15µH	AD
L912	VPCCM2R2MR09NY		Peaking, 2.2µH	AC
L915	VPCLN2R2MR13NY		Peaking, 2.2µH	AB
L916	RCiLPA012WJZZY		Coil, 33µH	AD
L917	RCiLPA012WJZZY		Coil, 33µH	AD
L918	RCiLPA010WJZZY		Coil, 15µH	AD
L919	VPCLN2R2MR13NY		Peaking, 2.2µH	AB
L923	RCiLPA010WJZZY		Coil, 15µH	AD
L931	RCiLPA171WJZZY		Coil, 22µH	AD
L1404	VPCEM470M3R7NY		Peaking, 47µH	AC
L1431	VPCEM470M3R7NY		Peaking, 47µH (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AC
L1601	VPCEM100MR70NY		Peaking, 10µH	AC
L1800	VPCEM470M3R7NY		Peaking, 47µH	AC
L1801	VPCEM470M3R7NY		Peaking, 47µH	AC
L3430	VPCEM4R7MR40NY		Peaking, 4.7µH	AC
L3432	VPCEM4R7MR40NY		Peaking, 4.7µH	AC
L3701	VPCEM4R7MR40NY		Peaking, 4.7µH	AC
L4404	VPCEM100MR70NY		Peaking, 10µH	AC
L4405	VPCEM470M3R7NY		Peaking, 47µH	AC
L4406	VPCEM100MR70NY		Peaking, 10µH	AC
L4451	RCiLPA127WJZZY		Coil, 3.3µH	AC
L6800	VPD9M180J2R4NY		Peaking, 18µH	AC
L7400	VPCEM100MR70NY		Peaking, 10µH	AC
L7800	VPCEM100MR70NY		Peaking, 10µH	AC
L7810	VPD9M6R8J1R8NY		Peaking, 6.8µH	AC
L8800	VPCEM470M3R7NY		Peaking, 47µH	AC
L8801	VPCEM470M3R7NY		Peaking, 47µH	AC
L8802	VPCEM470M3R7NY		Peaking, 47µH	AC

CAPACITORS

Ref. No.	Part No.	★				Code
C201	VCSATA1AJ106MY		10	10V	Tantalum	AC
C202	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C203	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C204	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C205	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C207	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C208	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C210	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C211	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C219	VCKYCZ1HB221KY		220p	50V	Ceramic	AA
C220	VCKYCZ1HB221KY		220p	50V	Ceramic	AA
C401	RC-KZA030WJZZY		2.2	10V	Ceramic	AB
C402	RC-KZA030WJZZY		2.2	10V	Ceramic	AB
C404	RC-KZA069WJZZY		4.7	10V	Ceramic	AB
C405	VCKYCZ1AB473KY		0.047	10V	Ceramic	AB
C407	VCKYCY0JB105KY		1	6.3V	Ceramic	AC
C410	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C411	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C412	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C413	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C414	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C415	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C417	RC-KZA069WJZZY		4.7	10V	Ceramic	AB
C418	VCCCCZ1HH100DY		10p	50V	Ceramic	AB
C419	VCCCCZ1HH100DY		10p	50V	Ceramic	AB

Ref. No.	Part No.	★	Description	Code
C420	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C421	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C423	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C424	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C425	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C430	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C432	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C435	VCKYCZ1EB103KY		0.01 25V Ceramic (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
C447	VCKYCZ1EB103KY		0.01 25V Ceramic (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
C450	RC-KZA069WJZZY		4.7 10V Ceramic (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AB
C451	VCKYCY0JB105KY		1 6.3V Ceramic (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AC
C452	VCKYCZ1AB104KY		0.1 10V Ceramic (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AB
C456	RC-KZA069WJZZY		4.7 10V Ceramic	AB
C460	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C462	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C463	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C465	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C473	VCKYCZ1AB104KY		0.1 10V Ceramic	AB
C474	VCKYCZ1AB104KY		0.1 10V Ceramic	AB
C475	VCKYCZ1HB221KY		220p 50V Ceramic	AA
C476	VCKYCZ1HB221KY		220p 50V Ceramic	AA
C477	VCKYCZ1HB221KY		220p 50V Ceramic	AA
C478	VCKYCZ1HB221KY		220p 50V Ceramic	AA
C701	VCKYCY1CB104KY		0.1 16V Ceramic	AB
C702	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C703	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C704	VCKYCY0JB105KY		1 6.3V Ceramic	AC
C705	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C706	RC-KZA069WJZZY		4.7 10V Ceramic	AB
C708	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C709	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C710	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C711	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C712	VCKYCY0JB105KY		1 6.3V Ceramic	AC
C713	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C716	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C717	VCCCCZ1HH101JY		100p 50V Ceramic	AB
C719	VCCCCZ1HH180JY		18p 50V Ceramic	AB
C720	VCCCCZ1HH180JY		18p 50V Ceramic	AB
C721	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C722	VCKYCZ1AB104KY		0.1 10V Ceramic	AB
C723	VCKYCZ1AB104KY		0.1 10V Ceramic	AB
C724	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C725	VCKYCZ1EB682KY		6800p 25V Ceramic	AB
C726	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C727	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C728	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C729	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C730	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C731	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C732	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C733	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C734	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C735	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C736	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C737	VCKYCZ1EB682KY		6800p 25V Ceramic	AB
C904	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C905	VCKYCZ0JB224KY		0.22 6.3V Ceramic	AB
C906	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C907	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C908	VCKYCZ1AB473KY		0.047 10V Ceramic	AB
C910	VCKYCZ1AB104KY		0.1 10V Ceramic	AB
C911	VCKYCZ1AB104KY		0.1 10V Ceramic	AB
C912	VCKYCY1CB104KY		0.1 16V Ceramic	AB
C913	VCKYCZ1HB222KY		2200p 50V Ceramic	AB
C914	VCCCCZ1HH101JY		100p 50V Ceramic	AB
C915	VCKYCY1AB224KY		0.22 10V Ceramic	AB
C916	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C917	VCKYCZ1HB221KY		220p 50V Ceramic	AA
C918	VCKYCZ1HB221KY		220p 50V Ceramic	AA
C919	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C920	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C921	VCKYCY1CB104KY		0.1 16V Ceramic	AB
C922	VCKYCY1CB104KY		0.1 16V Ceramic	AB
C923	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C924	VCKYCZ1HB471KY		470p 50V Ceramic	AB
C926	VCKYCY1HB223KY		0.022 50V Ceramic	AA
C927	VCKYCZ1HB471KY		470p 50V Ceramic	AB
C928	VCKYCZ1AB104KY		0.1 10V Ceramic	AB
C929	RC-KZA111WJZZY		1 25V Ceramic	AC
C930	RC-KZA107WJZZY		1 25V Ceramic	AC
C932	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C933	RC-KZA069WJZZY		4.7 10V Ceramic	AB
C934	RC-KZA030WJZZY		2.2 10V Ceramic	AB
C936	RC-KZA069WJZZY		4.7 10V Ceramic	AB
C938	RC-KZA069WJZZY		4.7 10V Ceramic	AB
C939	VCKYTV1CB105KY		1 16V Ceramic	AC
C943	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C946	VCKYTV1CB105KY		1 16V Ceramic	AC
C948	RC-KZA069WJZZY		4.7 10V Ceramic	AB
C949	VCKYTV1CB105KY		1 16V Ceramic	AC
C951	VCKYTV1CB105KY		1 16V Ceramic	AC
C953	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C954	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C956	RC-KZA069WJZZY		4.7 10V Ceramic	AB
C957	VCKYTV1CB105KY		1 16V Ceramic	AC
C960	RC-KZA109WJZZY		10 16V Ceramic	AC
C962	RC-KZA111WJZZY		1 25V Ceramic	AC
C966	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C970	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C971	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C972	RC-KZA109WJZZY		10 16V Ceramic	AC
C973	RC-KZA069WJZZY		4.7 10V Ceramic	AB
C974	RC-KZA069WJZZY		4.7 10V Ceramic	AB
C978	RC-KZA111WJZZY		1 25V Ceramic	AC
C980	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C982	RC-KZA069WJZZY		4.7 10V Ceramic	AB
C983	VCKYTV1CB105KY		1 16V Ceramic	AC
C990	RC-KZ0075TAZZY		2.2 16V Ceramic	AC
C991	RC-KZA107WJZZY		1 25V Ceramic	AC
C992	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C993	VCKYCY1AB224KY		0.22 10V Ceramic	AB
C1201	VCCCCZ1HH220JY		22p 50V Ceramic	AB
C1402	RC-KZA069WJZZY		4.7 10V Ceramic	AB
C1406	VCSATE0JJ107MY		100 6.3V Tantalum	AE
C1407	VCSATA0JJ336MY		33 6.3V Tantalum	AD
C1408	VCKYCY1AF105ZY		1 10V Ceramic	AC
C1409	VCKYCY1CB104KY		0.1 16V Ceramic	AB
C1410	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C1411	VCSATE0JJ107MY		100 6.3V Tantalum	AE
C1412	VCSATA0JJ336MY		33 6.3V Tantalum	AD
C1416	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C1417	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C1418	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C1419	VCKYCZ1AF104ZY		0.1 10V Ceramic (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AB
C1431	RC-KZA069WJZZY		4.7 10V Ceramic (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AB
C1432	VCKYCZ1EB103KY		0.01 25V Ceramic (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
C1433	VCCCCZ1HH150JY		15p 50V Ceramic (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AB
C1434	VCCCCZ1HH680JY		68p 50V Ceramic (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AB

Ref. No.	Part No.	★	Description	Code
C1435	VCKYCZ1EB103KY		0.01 25V Ceramic (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
C1436	VCCCCZ1HH150JY		15p 50V Ceramic (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AB
C1437	VCCCCZ1HH680JY		68p 50V Ceramic (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AB
C1438	VCKYCZ1AF104ZY		0.1 10V Ceramic (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AB
C1439	VCKYCY0JB105KY		1 6.3V Ceramic (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AC
C1440	VCKYCZ1EB103KY		0.01 25V Ceramic (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
C1441	VCKYCY0JB105KY		1 6.3V Ceramic (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AC
C1603	VCKYCY0JB105KY		1 6.3V Ceramic	AC
C1604	VCKYCY0JB105KY		1 6.3V Ceramic	AC
C1605	RC-KZA030WJZZY		2.2 10V Ceramic	AB
C1608	RC-KZA069WJZZY		4.7 10V Ceramic	AB
C1610	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C1611	VCKYCY1AB474KY		0.47 10V Ceramic	AC
C1617	VCKYCY1AB474KY		0.47 10V Ceramic	AC
C1801	RC-KZA144WJZZY		0.1 6.3V Ceramic	AB
C1802	VCKYCZ1AB104KY		0.1 10V Ceramic	AB
C1803	VCKYCZ1AB104KY		0.1 10V Ceramic	AB
C1804	VCKYCZ1AB104KY		0.1 10V Ceramic	AB
C1805	RC-KZA069WJZZY		4.7 10V Ceramic	AB
C1806	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C1807	VCKYTV1CB105KY		1 16V Ceramic	AC
C1808	RC-KZA114WJZZY		1 25V Ceramic	AB
C1809	RC-KZA114WJZZY		1 25V Ceramic	AB
C1810	RC-KZA114WJZZY		1 25V Ceramic	AB
C1811	VCKYCY0JB105KY		1 6.3V Ceramic	AC
C1816	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C1901	VCKYCY1EB104KY		0.1 25V Ceramic	AB
C1903	VCKYCY1EB104KY		0.1 25V Ceramic	AB
C1906	VCKYCY1EB104KY		0.1 25V Ceramic	AB
C1908	VCKYCY1EB104KY		0.1 25V Ceramic	AB
C1909	VCKYCY1AF105ZY		1 10V Ceramic	AC
C1910	VCKYCY1EB104KY		0.1 25V Ceramic	AB
C1911	RC-KZA069WJZZY		4.7 10V Ceramic	AB
C1912	VCKYCY1EB104KY		0.1 25V Ceramic	AB
C1913	VCKYCY1EB104KY		0.1 25V Ceramic	AB
C1914	VCKYTV1CB105KY		1 16V Ceramic	AC
C1915	VCKYCY1EB104KY		0.1 25V Ceramic	AB
C1916	VCKYCY1EB104KY		0.1 25V Ceramic	AB
C3320	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C3321	VCKYTV1CB105KY		1 16V Ceramic	AC
C3401	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C3402	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C3403	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C3404	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C3405	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C3406	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C3407	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C3408	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C3409	VCKYTV1CB105KY		1 16V Ceramic	AC
C3410	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C3411	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C3412	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C3416	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C3418	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C3420	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C3430	VCSATA0YJ336MY		33 7V Tantalum	AD
C3432	VCSATA0YJ336MY		33 7V Tantalum	AD
C3701	VCKYCY0JB105KY		1 6.3V Ceramic	AC
C3702	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C3704	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C3705	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C3706	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C3707	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C3708	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C3710	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C3711	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C3712	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C3713	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C3714	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C4401	RC-KZA069WJZZY		4.7 10V Ceramic	AB
C4402	RC-KZA030WJZZY		2.2 10V Ceramic	AB
C4403	RC-KZA042WJZZY		10 6.3V Ceramic	AD
C4404	RC-KZA030WJZZY		2.2 10V Ceramic	AB
C4405	RC-KZA030WJZZY		2.2 10V Ceramic	AB
C4406	RC-KZA030WJZZY		2.2 10V Ceramic	AB
C4409	VCKYCZ1AB104KY		0.1 10V Ceramic	AB
C4410	VCKYCZ1AB104KY		0.1 10V Ceramic	AB
C4411	VCKYCZ1AB104KY		0.1 10V Ceramic	AB
C4412	VCKYCZ1AB104KY		0.1 10V Ceramic	AB
C4413	VCKYCZ1AB104KY		0.1 10V Ceramic	AB
C4414	VCKYCZ1AB104KY		0.1 10V Ceramic	AB
C4417	VCKYCZ1HB221KY		220p 50V Ceramic	AA
C4418	VCKYCZ1HB221KY		220p 50V Ceramic	AA
C4419	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C4420	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C4421	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C4422	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C4423	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C4424	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C4425	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C4426	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C4428	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C4429	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C4430	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C4431	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C4432	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C4433	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C4435	RC-KZA069WJZZY		4.7 10V Ceramic	AB
C4436	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C4437	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C4442	RC-KZA030WJZZY		2.2 10V Ceramic	AB
C4451	VCCCCZ1HH470JY		47p 50V Ceramic	AB
C4454	VCCCCZ1HH470JY		47p 50V Ceramic	AB
C4461	VCKYCY0JB105KY		1 6.3V Ceramic (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AC
C4462	VCKYCZ1AB104KY		0.1 10V Ceramic (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AB
C4463	VCKYCZ1EB682KY		6800p 25V Ceramic (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AB
C4481	RC-KZA042WJZZY		10 6.3V Ceramic (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AD
C4481	RC-KZA069WJZZY		4.7 10V Ceramic (Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))	AB
C4482	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C4483	RC-KZA069WJZZY		4.7 10V Ceramic (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AB
C4483	VCKYTV1AB105KY		1 10V Ceramic (Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))	AC
C4485	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C4702	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C4703	VCKYCZ1AF104ZY		0.1 10V Ceramic	AB
C6800	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C6804	VCCCCZ1HH680JY		68p 50V Ceramic	AB
C6805	VCKYCZ1AB104KY		0.1 10V Ceramic	AB
C6827	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C6828	VCCCCZ1HH101JY		100p 50V Ceramic	AB
C6829	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C7400	VCKYCY0JB105KY		1 6.3V Ceramic	AC
C7401	VCKYCY0JB105KY		1 6.3V Ceramic	AC

Ref. No.	Part No.	★	Description	Code
C7404	VCKYCZ1EB472KY		4700p 25V Ceramic	AB
C7413	VCKYCZ1HB221KY		220p 50V Ceramic	AA
C7414	VCCCCZ1HH330JY		33p 50V Ceramic	AB
C7417	VCKYCY0JB105KY		1 6.3V Ceramic	AC
C7800	RC-KZA030WJZZY		2.2 10V Ceramic	AB
C7801	VCKYCY0JB105KY		1 6.3V Ceramic	AC
C7802	VCKYCY0JB105KY		1 6.3V Ceramic	AC
C7803	VCKYCY0JB105KY		1 6.3V Ceramic	AC
C7804	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C7810	VCCCCZ1HH390JY		39p 50V Ceramic	AB
C7812	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C7821	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C7827	VCKYCZ1HB102KY		1000p 50V Ceramic	AB
C7828	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C7829	VCCCCZ1HH101JY		100p 50V Ceramic	AB
C8800	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C8801	VCKYCY1AF105ZY		1 10V Ceramic	AC
C8802	RC-KZA114WJZZY		1 25V Ceramic	AB
C8803	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C8804	VCKYTV1CB105KY		1 16V Ceramic	AC
C8805	RC-KZA069WJZZY		4.7 10V Ceramic	AB
C8806	VCKYTV1EB104KY		0.1 25V Ceramic	AB
C8807	VCKYCY0JB105KY		1 6.3V Ceramic	AC
C8808	VCKYCY0JB105KY		1 6.3V Ceramic	AC
C8809	VCKYCY0JB105KY		1 6.3V Ceramic	AC
C8810	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C8813	VCKYCY0JB105KY		1 6.3V Ceramic	AC
C8816	VCKYCZ1EB103KY		0.01 25V Ceramic	AA
C8822	VCCCCZ1HH101JY		100p 50V Ceramic	AB
C8823	VCKYCY0JB105KY		1 6.3V Ceramic	AC
C8824	VCKYCY0JB105KY		1 6.3V Ceramic	AC
C8825	VCKYCY0JB105KY		1 6.3V Ceramic	AC

RESISTORS

Ref. No.	Part No.	★	Description	Code
R201	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R219	VRS-CZ1JF222JY		2.2k 1/16W Metal Oxide	AA
R246	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R401	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R402	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R403	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R404	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R406	VRS-CZ1JF101JY		100 1/16W Metal Oxide	AA
R407	VRS-CZ1JF153JY		15k 1/16W Metal Oxide	AA
R408	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R409	VRS-CZ1JF103JY		10k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R410	VRS-CZ1JF103JY		10k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R411	VRS-CZ1JF154JY		150k 1/16W Metal Oxide	AA
R412	VRS-CZ1JF334JY		330k 1/16W Metal Oxide	AA
R416	VRS-CZ1JF823JY		82k 1/16W Metal Oxide	AA
R418	VRS-CZ1JF101JY		100 1/16W Metal Oxide	AA
R432	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R436	VRS-CZ1JF224JY		220k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R437	VRS-CZ1JF224JY		220k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R438	VRS-CZ1JF000JY		0 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R440	VRS-CZ1JF393JY		39k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R441	VRS-CZ1JF563JY		56k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R442	VRS-CZ1JF114JY		110k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R443	VRS-CZ1JF105JY		1M 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R462	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R463	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R467	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R468	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R471	VRS-CZ1JF472JY		4.7k 1/16W Metal Oxide	AA
R477	VRS-CZ1JF823JY		82k 1/16W Metal Oxide	AA
R478	VRS-CZ1JF823JY		82k 1/16W Metal Oxide	AA
R701	VRS-CZ1JF472JY		4.7k 1/16W Metal Oxide	AA
R702	VRS-CZ1JF750JY		75 1/16W Metal Oxide	AA
R703	VRS-CZ1JF562JY		5.6k 1/16W Metal Oxide	AA
R704	VRS-CZ1JF273JY		27k 1/16W Metal Oxide	AA
R705	VRS-CZ1JF224JY		220k 1/16W Metal Oxide	AA
R706	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R707	VRS-CZ1JF184JY		180k 1/16W Metal Oxide	AA
R708	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R709	VRS-CZ1JF104JY		100k 1/16W Metal Oxide	AA
R710	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R711	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R712	VRS-CZ1JF333JY		33k 1/16W Metal Oxide	AA
R713	VRS-CZ1JF101JY		100 1/16W Metal Oxide	AA
R714	VRS-CZ1JF104JY		100k 1/16W Metal Oxide	AA
R715	VRS-CZ1JF104JY		100k 1/16W Metal Oxide	AA
R716	VRS-CZ1JF272JY		2.7k 1/16W Metal Oxide	AA
R717	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R718	VRS-CZ1JF272JY		2.7k 1/16W Metal Oxide	AA
R719	VRS-CZ1JF101JY		100 1/16W Metal Oxide	AA
R720	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R721	VRS-CZ1JF104JY		100k 1/16W Metal Oxide	AA
R722	VRS-CZ1JF104JY		100k 1/16W Metal Oxide	AA
R723	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R724	VRS-CZ1JF823DY		82k 1/16W Metal Oxide	AA
R725	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R726	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R728	VRS-CZ1JF104JY		100k 1/16W Metal Oxide	AA
R729	VRS-CZ1JF332JY		3.3k 1/16W Metal Oxide	AA
R730	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R731	VRS-CZ1JF104JY		100k 1/16W Metal Oxide	AA
R732	VRS-CZ1JF224DY		220k 1/16W Metal Oxide	AA
R733	VRS-CZ1JF331JY		330 1/16W Metal Oxide	AA
R734	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R735	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R736	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R737	VRS-CZ1JF332JY		3.3k 1/16W Metal Oxide	AA
R738	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R739	VRS-CZ1JF105JY		1M 1/16W Metal Oxide	AA
R740	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R741	VRS-CZ1JF332JY		3.3k 1/16W Metal Oxide	AA
R742	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R743	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R744	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R745	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R746	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R747	VRS-CZ1JF184JY		180k 1/16W Metal Oxide	AA
R748	VRS-CZ1JF105JY		1M 1/16W Metal Oxide	AA
R749	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R750	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R751	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R752	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R753	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R754	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R755	VRS-CZ1JF222JY		2.2k 1/16W Metal Oxide	AA
R756	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R757	VRS-CZ1JF104JY		100k 1/16W Metal Oxide	AA
R759	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R760	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R761	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R762	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R764	VRS-CZ1JF104JY		100k 1/16W Metal Oxide	AA
R765	VRS-CZ1JF104JY		100k 1/16W Metal Oxide	AA
R766	VRS-CZ1JF104JY		100k 1/16W Metal Oxide	AA
R767	VRS-CZ1JF222JY		2.2k 1/16W Metal Oxide	AA
R771	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
R772	VRS-CZ1JF474JY		470k 1/16W Metal Oxide	AA
R779	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R782	VRS-CZ1JF104JY		100k 1/16W Metal Oxide	AA
R902	VRS-CZ1JF562JY		5.6k 1/16W Metal Oxide	AA
R903	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R904	VRS-CZ1JF123JY		12k 1/16W Metal Oxide	AA
R905	VRS-CZ1JF153JY		15k 1/16W Metal Oxide	AA
R906	VRS-CZ1JF153JY		15k 1/16W Metal Oxide	AA
R907	VRS-CZ1JF822JY		8.2k 1/16W Metal Oxide	AA
R909	VRS-CZ1JF562DY		5.6k 1/16W Metal Oxide	AA
R910	VRS-CZ1JF272DY		2.7k 1/16W Metal Oxide	AB
R912	VRS-CZ1JF473JY		47k 1/16W Metal Oxide	AA
R914	VRS-CZ1JF105JY		1M 1/16W Metal Oxide	AA
R917	VRS-CZ1JF682DY		6.8k 1/16W Metal Oxide	AB
R918	VRS-CZ1JF472DY		4.7k 1/16W Metal Oxide	AB
R919	VRS-CZ1JF103DY		10k 1/16W Metal Oxide	AA
R920	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R924	VRS-CZ1JF103DY		10k 1/16W Metal Oxide	AA
R926	VRS-CZ1JF333DY		33k 1/16W Metal Oxide	AA
R927	VRS-CZ1JF683DY		68k 1/16W Metal Oxide	AA
R928	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R929	VRS-CZ1JF473DY		47k 1/16W Metal Oxide	AA
R930	VRS-CZ1JF333JY		33k 1/16W Metal Oxide	AA
R931	VRS-CZ1JF104JY		100k 1/16W Metal Oxide	AA
R932	VRS-CY1JF000JY		0 1/16W Metal Oxide	AA
R933	VRS-CZ1JF683JY		68k 1/16W Metal Oxide	AA
R934	VRS-CZ1JF153JY		15k 1/16W Metal Oxide	AA
R935	VRS-CZ1JF183JY		18k 1/16W Metal Oxide	AA
R936	VRS-CZ1JF333JY		33k 1/16W Metal Oxide	AA
R937	VRS-CZ1JF333JY		33k 1/16W Metal Oxide	AA
R938	VRS-CZ1JF105JY		1M 1/16W Metal Oxide	AA
R939	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R940	VRS-CZ1JF153DY		15k 1/16W Metal Oxide	AA
R941	VRS-CZ1JF103DY		10k 1/16W Metal Oxide	AA
R942	VRS-CZ1JF105JY		1M 1/16W Metal Oxide	AA
R943	VRS-CZ1JF303DY		30k 1/16W Metal Oxide	AA
R946	VRS-CZ1JF163DY		16k 1/16W Metal Oxide	AA
R948	VRS-CZ1JF473DY		47k 1/16W Metal Oxide	AA
R949	VRS-CZ1JF681DY		680 1/16W Metal Oxide	AB
R951	VRS-CZ1JF681JY		680 1/16W Metal Oxide	AA
R952	VRS-CZ1JF223DY		22k 1/16W Metal Oxide	AB
R954	VRS-CZ1JF333DY		33k 1/16W Metal Oxide	AA
R957	VRS-CZ1JF333DY		33k 1/16W Metal Oxide	AA
R959	VRS-CZ1JF123DY		12k 1/16W Metal Oxide	AA
R960	VRS-CZ1JF182DY		1.8k 1/16W Metal Oxide	AA
R962	VRS-CZ1JF105JY		1M 1/16W Metal Oxide	AA
R965	VRS-CZ1JF122DY		1.2k 1/16W Metal Oxide	AA
R968	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R970	VRS-CZ1JF681JY		680 1/16W Metal Oxide	AA
R972	VRS-CZ1JF133DY		13k 1/16W Metal Oxide	AA
R973	VRS-CZ1JF561JY		560 1/16W Metal Oxide	AA
R974	VRS-CZ1JF102DY		1k 1/16W Metal Oxide	AA
R975	VRS-CZ1JF331JY		330 1/16W Metal Oxide	AA
R977	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R979	VRS-CZ1JF104DY		100k 1/16W Metal Oxide	AA
R980	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R982	VRS-CZ1JF471JY		470 1/16W Metal Oxide	AA
R983	VRS-CZ1JF471JY		470 1/16W Metal Oxide	AA
R987	VRS-CZ1JF821JY		820 1/16W Metal Oxide	AA
R988	VRS-CZ1JF821JY		820 1/16W Metal Oxide	AA
R990	VRS-CZ1JF681JY		680 1/16W Metal Oxide	AA
R1401	VRS-CZ1JF000JY		0 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R1402	VRS-CZ1JF470JY		47 1/16W Metal Oxide	AA
R1403	VRS-CZ1JF470JY		47 1/16W Metal Oxide	AA
R1404	VRS-CZ1JF270JY		27 1/16W Metal Oxide	AA
R1405	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R1406	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R1413	VRS-CZ1JF470JY		47 1/16W Metal Oxide	AA
R1414	VRS-CZ1JF270JY		27 1/16W Metal Oxide	AA
R1419	VRS-CZ1JF270JY		27 1/16W Metal Oxide	AA
R1422	VRS-CZ1JF103JY		10k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R1423	VRS-CZ1JF103JY		10k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R1424	VRS-CZ1JF103JY		10k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R1431	VRS-CZ1JF122JY		1.2k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R1432	VRS-CZ1JF332JY		3.3k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R1433	VRS-CZ1JF561JY		560 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R1434	VRS-CZ1JF561JY		560 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R1435	VRS-CZ1JF122JY		1.2k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R1436	VRS-CZ1JF393JY		39k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R1437	VRS-CZ1JF223JY		22k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R1438	VRS-CZ1JF122JY		1.2k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R1439	VRS-CZ1JF272JY		2.7k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R1440	VRS-CZ1JF561JY		560 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R1441	VRS-CZ1JF561JY		560 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R1442	VRS-CZ1JF470JY		47 1/16W Metal Oxide (Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))	AA
R1442	VRS-CZ1JF750JY		75 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R1443	VRS-CZ1JF000JY		0 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R1443	VRS-CZ1JF270JY		27 1/16W Metal Oxide (Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))	AA
R1444	VRS-CZ1JF000JY		0 1/16W Metal Oxide (Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))	AA
R1445	VRS-CZ1JF330JY		33 1/16W Metal Oxide (Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))	AA
R1462	VRS-CZ1JF000JY		0 1/16W Metal Oxide (Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))	AA
R1462	VRS-CZ1JF474DY		470k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R1803	VRS-CZ1JF333JY		33k 1/16W Metal Oxide	AA
R1804	VRS-CZ1JF563JY		56k 1/16W Metal Oxide	AA
R1805	VRS-CZ1JF153JY		15k 1/16W Metal Oxide	AA
R1806	VRS-CZ1JF153JY		15k 1/16W Metal Oxide	AA
R1807	VRS-CZ1JF1R0JY		1 1/16W Metal Oxide	AA
R1808	VRS-CZ1JF1R0JY		1 1/16W Metal Oxide	AA
R1809	VRS-CZ1JF100JY		10 1/16W Metal Oxide	AA
R1810	VRS-CZ1JF100JY		10 1/16W Metal Oxide	AA
R1811	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R1812	VRS-CZ1JF1R0JY		1 1/16W Metal Oxide	AA
R1813	VRS-CZ1JF221JY		220 1/16W Metal Oxide	AA
R1814	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
R1815	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R1816	VRS-CZ1JF221JY		220 1/16W Metal Oxide	AA
R1817	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R1818	VRS-CZ1JF473JY		47k 1/16W Metal Oxide	AA
R1819	VRS-CZ1JF473JY		47k 1/16W Metal Oxide	AA
R1820	VRS-CZ1JF100JY		10 1/16W Metal Oxide	AA
R1821	VRS-CZ1JF100JY		10 1/16W Metal Oxide	AA
R1822	VRS-CZ1JF100JY		10 1/16W Metal Oxide	AA
R1823	VRS-CZ1JF100JY		10 1/16W Metal Oxide	AA
R1824	VRS-CZ1JF101JY		100 1/16W Metal Oxide	AA
R1825	VRS-CZ1JF101JY		100 1/16W Metal Oxide	AA
R1826	VRS-CZ1JF101JY		100 1/16W Metal Oxide	AA
R1827	VRS-CZ1JF333JY		33k 1/16W Metal Oxide	AA
R1828	VRS-CZ1JF473JY		47k 1/16W Metal Oxide	AA
R1903	VRS-CZ1JF103DY		10k 1/16W Metal Oxide	AA
R1904	VRS-CZ1JF103DY		10k 1/16W Metal Oxide	AA
R1905	VRS-CZ1JF331JY		330 1/16W Metal Oxide	AA
R1906	VRS-CZ1JF392DY		3.9k 1/16W Metal Oxide	AA
R1907	VRS-CZ1JF101JY		100 1/16W Metal Oxide	AA
R1908	VRS-CZ1JF203DY		20k 1/16W Metal Oxide	AA
R1911	VRS-CZ1JF153JY		15k 1/16W Metal Oxide	AA
R1912	VRS-CZ1JF153JY		15k 1/16W Metal Oxide	AA
R1913	VRS-CZ1JF472JY		4.7k 1/16W Metal Oxide	AA
R1914	VRS-CZ1JF103DY		10k 1/16W Metal Oxide	AA
R1915	VRS-CZ1JF363DY		36k 1/16W Metal Oxide	AA
R1916	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R1917	VRS-CZ1JF163DY		16k 1/16W Metal Oxide	AA
R1918	VRS-CZ1JF103DY		10k 1/16W Metal Oxide	AA
R1919	VRS-CZ1JF153JY		15k 1/16W Metal Oxide	AA
R1920	VRS-CZ1JF682JY		6.8k 1/16W Metal Oxide	AA
R1921	VRS-CZ1JF393DY		39k 1/16W Metal Oxide	AA
R1922	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R1923	VRS-CZ1JF153DY		15k 1/16W Metal Oxide	AA
R1924	VRS-CZ1JF104JY		100k 1/16W Metal Oxide	AA
R1925	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R1926	VRS-CZ1JF392DY		3.9k 1/16W Metal Oxide	AA
R1927	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R1928	VRS-CZ1JF182DY		1.8k 1/16W Metal Oxide	AA
R1929	VRS-CZ1JF223JY		22k 1/16W Metal Oxide	AA
R1943	VRS-CZ1JF222DY		2.2k 1/16W Metal Oxide	AA
R1948	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R1951	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R1993	VRS-CZ1JF152JY		1.5k 1/16W Metal Oxide	AA
R3320	VRS-CZ1JF562JY		5.6k 1/16W Metal Oxide	AA
R3321	VRS-CZ1JF153JY		15k 1/16W Metal Oxide	AA
R3401	VRS-CZ1JF472JY		4.7k 1/16W Metal Oxide	AA
R3403	VRS-CZ1JF331JY		330 1/16W Metal Oxide	AA
R3404	VRS-CZ1JF122JY		1.2k 1/16W Metal Oxide	AA
R3405	VRS-CZ1JF562JY		5.6k 1/16W Metal Oxide	AA
R3413	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R3416	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R3427	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R3434	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R3436	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R3438	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R3454	VRS-CZ1JF561JY		560 1/16W Metal Oxide	AA
R3457	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R3458	VRS-CZ1JF222JY		2.2k 1/16W Metal Oxide	AA
R3701	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R3702	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R3703	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R3704	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R3707	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R3708	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R3710	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R3711	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R3712	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R3713	VRS-CZ1JF473DY		47k 1/16W Metal Oxide	AA
R3714	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R3716	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R3717	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R3718	VRS-CZ1JF104JY		100k 1/16W Metal Oxide	AA
R3719	VRS-CZ1JF273JY		27k 1/16W Metal Oxide	AA
R3720	VRS-CZ1JF223JY		22k 1/16W Metal Oxide	AA
R3721	VRS-CZ1JF272JY		2.7k 1/16W Metal Oxide	AA
R3722	VRS-CZ1JF682JY		6.8k 1/16W Metal Oxide	AA
R3723	VRS-CZ1JF102JY		1k 1/16W Metal Oxide	AA
R3724	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R4401	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R4402	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R4403	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R4404	VRS-CZ1JF332DY		3.3k 1/16W Metal Oxide	AA
R4405	VRS-CZ1JF911DY		910 1/16W Metal Oxide	AA
R4406	VRS-CZ1JF221DY		220 1/16W Metal Oxide	AA
R4407	VRS-CZ1JF221DY		220 1/16W Metal Oxide	AA
R4408	VRS-CZ1JF103DY		10k 1/16W Metal Oxide	AA
R4409	VRS-CZ1JF472DY		4.7k 1/16W Metal Oxide	AB
R4414	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R4415	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R4435	VRS-CZ1JF330JY		33 1/16W Metal Oxide	AA
R4436	VRS-CZ1JF272JY		2.7k 1/16W Metal Oxide	AA
R4437	VRS-CZ1JF272JY		2.7k 1/16W Metal Oxide	AA
R4451	VRS-CZ1JF104JY		100k 1/16W Metal Oxide	AA
R4453	VRS-CZ1JF151JY		150 1/16W Metal Oxide	AA
R4454	VRS-CZ1JF104JY		100k 1/16W Metal Oxide	AA
R4456	VRS-CZ1JF151JY		150 1/16W Metal Oxide	AA
R4460	VRS-CZ1JF000JY		0 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R4461	VRS-CZ1JF123DY		12k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R4462	VRS-CZ1JF123DY		12k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R4463	VRS-CZ1JF103JY		10k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R4464	VRS-CZ1JF330JY		33 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R4465	VRS-CZ1JF000JY		0 1/16W Metal Oxide (Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))	AA
R4466	VRS-CZ1JF332JY		3.3k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R4470	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R4471	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R4472	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R4473	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R4474	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R4475	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R4476	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R4477	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R4481	VRS-CZ1JF103DY		10k 1/16W Metal Oxide	AA
R4482	VRS-CZ1JF182DY		1.8k 1/16W Metal Oxide	AA
R4485	VRS-CZ1JF224JY		220k 1/16W Metal Oxide	AA
R4486	VRS-CZ1JF224JY		220k 1/16W Metal Oxide	AA
R4487	VRS-CZ1JF332JY		3.3k 1/16W Metal Oxide	AA
R4488	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R4489	VRS-CZ1JF104JY		100k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R4493	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R4494	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R4495	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R4703	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R6800	VRS-CZ1JF105JY		1M 1/16W Metal Oxide	AA
R6801	VRS-CZ1JF221DY		220 1/16W Metal Oxide	AA
R6802	VRS-CZ1JF221DY		220 1/16W Metal Oxide	AA
R6803	VRS-CZ1JF221DY		220 1/16W Metal Oxide	AA
R6804	VRS-CZ1JF621DY		620 1/16W Metal Oxide	AA
R6805	VRS-CZ1JF333JY		33k 1/16W Metal Oxide	AA
R6807	VRS-CZ1JF564JY		560k 1/16W Metal Oxide	AB
R6808	VRS-CZ1JF564JY		560k 1/16W Metal Oxide	AB
R6809	VRS-CZ1JF103DY		10k 1/16W Metal Oxide	AA
R6810	VRS-CZ1JF472DY		4.7k 1/16W Metal Oxide	AB
R6818	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R6819	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description			Code
R6820	VRS-CZ1JF000JY		0	1/16W	Metal Oxide	AA
R6832	VRS-CZ1JF333JY		33k	1/16W	Metal Oxide	AA
R6833	VRS-CZ1JF334JY		330k	1/16W	Metal Oxide	AA
R6835	VRS-CZ1JF000JY		0	1/16W	Metal Oxide	AA
R6836	VRS-CZ1JF104JY		100k	1/16W	Metal Oxide	AA
R6837	VRS-CZ1JF682DY		6.8k	1/16W	Metal Oxide	AB
R6839	VRS-CZ1JF682DY		6.8k	1/16W	Metal Oxide	AB
R6840	VRS-CZ1JF103JY		10k	1/16W	Metal Oxide	AA
R7401	VRS-CZ1JF561JY		560	1/16W	Metal Oxide	AA
R7402	VRS-CZ1JF472JY		4.7k	1/16W	Metal Oxide	AA
R7403	VRS-CZ1JF273JY		27k	1/16W	Metal Oxide	AA
R7413	VRS-CZ1JF512DY		5.1k	1/16W	Metal Oxide	AA
R7415	VRS-CZ1JF560DY		56	1/16W	Metal Oxide	AA
R7416	VRS-CZ1JF560DY		56	1/16W	Metal Oxide	AA
R7417	VRS-CZ1JF560DY		56	1/16W	Metal Oxide	AA
R7418	VRS-CZ1JF560DY		56	1/16W	Metal Oxide	AA
R7419	VRS-CZ1JF221JY		220	1/16W	Metal Oxide	AA
R7420	VRS-CZ1JF104JY		100k	1/16W	Metal Oxide	AA
R7422	VRS-CZ1JF392DY		3.9k	1/16W	Metal Oxide	AA
R7423	VRS-CZ1JF392DY		3.9k	1/16W	Metal Oxide	AA
R7424	VRS-CZ1JF242DY		2.4k	1/16W	Metal Oxide	AA
R7801	VRS-CZ1JF221DY		220	1/16W	Metal Oxide	AA
R7802	VRS-CZ1JF221DY		220	1/16W	Metal Oxide	AA
R7803	VRS-CZ1JF221DY		220	1/16W	Metal Oxide	AA
R7804	VRS-CZ1JF621DY		620	1/16W	Metal Oxide	AA
R7811	VRS-CZ1JF105JY		1M	1/16W	Metal Oxide	AA
R7820	VRS-CZ1JF564JY		560k	1/16W	Metal Oxide	AB
R7821	VRS-CZ1JF564JY		560k	1/16W	Metal Oxide	AB
R7826	VRS-CZ1JF000JY		0	1/16W	Metal Oxide	AA
R7827	VRS-CZ1JF000JY		0	1/16W	Metal Oxide	AA
R7828	VRS-CZ1JF000JY		0	1/16W	Metal Oxide	AA
R7832	VRS-CZ1JF333JY		33k	1/16W	Metal Oxide	AA
R7833	VRS-CZ1JF334JY		330k	1/16W	Metal Oxide	AA
R7834	VRS-CZ1JF000JY		0	1/16W	Metal Oxide	AA
R7835	VRS-CZ1JF333JY		33k	1/16W	Metal Oxide	AA
R7836	VRS-CZ1JF564JY		560k	1/16W	Metal Oxide	AB
R7837	VRS-CZ1JF103JY		10k	1/16W	Metal Oxide	AA
R7838	VRS-CZ1JF682DY		6.8k	1/16W	Metal Oxide	AB
R7839	VRS-CZ1JF682DY		6.8k	1/16W	Metal Oxide	AB
R8800	VRS-CZ1JF223JY		22k	1/16W	Metal Oxide	AA
R8801	VRS-CZ1JF273JY		27k	1/16W	Metal Oxide	AA
R8803	VRS-CZ1JF105JY		1M	1/16W	Metal Oxide	AA
R8804	VRS-CZ1JF102JY		1k	1/16W	Metal Oxide	AA
R8805	VRS-CZ1JF223JY		22k	1/16W	Metal Oxide	AA
R8806	VRS-CZ1JF473JY		47k	1/16W	Metal Oxide	AA
R8807	VRS-CZ1JF104JY		100k	1/16W	Metal Oxide	AA
R8808	VRS-CZ1JF223JY		22k	1/16W	Metal Oxide	AA
R8809	VRS-CZ1JF473JY		47k	1/16W	Metal Oxide	AA
R8810	VRS-CZ1JF473DY		47k	1/16W	Metal Oxide	AA
R8814	VRS-CZ1JF100JY		10	1/16W	Metal Oxide	AA
R8815	VRS-CZ1JF473DY		47k	1/16W	Metal Oxide	AA
R8816	VRS-CZ1JF153DY		15k	1/16W	Metal Oxide	AA
R8817	VRS-CZ1JF100JY		10	1/16W	Metal Oxide	AA
R8818	VRS-CZ1JF151DY		150	1/16W	Metal Oxide	AA
R8825	VRS-CZ1JF472JY		4.7k	1/16W	Metal Oxide	AA
R8826	VRS-CZ1JF473JY		47k	1/16W	Metal Oxide	AA
R8827	VRS-CZ1JF393JY		39k	1/16W	Metal Oxide	AA
R8828	VRS-CZ1JF224JY		220k	1/16W	Metal Oxide	AA
R8832	VRS-CZ1JF221JY		220	1/16W	Metal Oxide	AA
R8838	VRS-CZ1JF221JY		220	1/16W	Metal Oxide	AA
R8841	VRS-CZ1JF473JY		47k	1/16W	Metal Oxide	AA
R8842	VRS-CZ1JF333JY		33k	1/16W	Metal Oxide	AA
R8843	VRS-CZ1JF000JY		0	1/16W	Metal Oxide	AA
R8844	VRS-CZ1JF000JY		0	1/16W	Metal Oxide	AA
R8845	VRS-CZ1JF000JY		0	1/16W	Metal Oxide	AA
R8846	VRS-CZ1JF000JY		0	1/16W	Metal Oxide	AA
R8847	VRS-CZ1JF000JY		0	1/16W	Metal Oxide	AA
R8848	VRS-CZ1JF562JY		5.6k	1/16W	Metal Oxide	AA
R8849	VRS-CZ1JF000JY		0	1/16W	Metal Oxide	AA
R8850	VRS-CZ1JF000JY		0	1/16W	Metal Oxide	AA
R8851	VRS-CZ1JF000JY		0	1/16W	Metal Oxide	AA
R8867	VRS-CZ1JF124JY		120k	1/16W	Metal Oxide	AA
R8868	VRS-CZ1JF104JY		100k	1/16W	Metal Oxide	AA

Ref. No.	Part No.	★	Description			Code
BALUNES						
FB201	RBLN-0102TAZZY		Balun, BLN-0102TA			AB
FB415	RBLN-0257TAZZY		Balun, BLN-0257TA			AB
FB456	RBLN-0102TAZZY		Balun, BLN-0102TA			AB
FB900	RBLN-0119TAZZY		Balun, BLN-0119TA			AC
FB901	RBLN-0119TAZZY		Balun, BLN-0119TA			AC
FB3719	RBLN-0257TAZZY		Balun, BLN-0257TA			AB
FB4402	RBLN-0102TAZZY		Balun, BLN-0102TA			AB
FB7401	RBLN-0102TAZZY		Balun, BLN-0102TA			AB
MISCELLANEOUS PARTS						
RMC701	RRMCUA012WJZZ		Remote Receiver			AF
P1201	QPLGN0276TAZZY		Plug, 2Pin			AD
P3301	QPLGN0576TAZZY		Plug, 5Pin			AC
P3303	QCNCMA088WJZZY		Connector, 30Pin			AF
SC1201	QCNCW8089TAZZY		Connector, 80Pin			AK
SC1202	QCNCW3396TAZZY		Connector, 33Pin			AG
SC1800	QCNCW1895TAZZY		Connector, 18Pin			AE
SC1801	QCNCW1894TAZZY		Connector, 18Pin			AE
SC3301	QCNCWA082WJZZY		Connector, 33Pin			AG
SC3302	QCNCWA041WJZZY		Connector, 33Pin			AE
SC8800	QCNCWA081WJZZY		Connector, 27Pin			AG
	PSPAZA243WJZZ		Spacer			AB

DUNTKC366QA50
CCD PWB UNIT

Ref. No.	Part No.	★	Description			Code
INTEGRATED CIRCUITS						
IC21	VHiCXD2489A-1Y		ICXD2489A			AX
IC101	VHiHD49334N-1Y		HD49334N			AP
TRANSISTOR						
Q1	VS2SC5384C/-1Y		2SC5384C			AB
DIODE						
D2	VHD1SS400++-1Y		1SS400++			AB
PACKAGED CIRCUIT						
X1	RCRSCA050WJZZY		Crystal, CRSCA050WJ			AG
COILS						
L22	VPCEM100MR70NY		Peaking, 10µH			AC
L23	VPCEM100MR70NY		Peaking, 10µH			AC
L101	VPCEM100MR70NY		Peaking, 10µH			AC
CAPACITORS						
C1	VCSATA1CJ106MY		10	16V	Tantalum	AD
C2	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C3	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C4	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C5	VCKYCZ1HB102KY		1000p	50V	Ceramic	AB
C6	VCKYCY1EB104KY		0.1	25V	Ceramic	AB
C7	RC-KZA178WJZZY		4.7	25V	Ceramic	AC
C21	RC-KZA178WJZZY		4.7	25V	Ceramic	AC
C22	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C23	RC-KZA178WJZZY		4.7	25V	Ceramic	AC
C24	VCSATA1CJ106MY		10	16V	Tantalum	AD
C25	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C27	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C30	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C32	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C33	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C34	VCKYCZ1HB102KY		1000p	50V	Ceramic	AB
C37	VCSATA0YJ156MY		15	6.3V	Tantalum	AD
C40	VCSATA0YJ336MY		33	7V	Tantalum	AD
C51	VCCCCZ1HH100DY		10p	50V	Ceramic	AB
C52	VCCCCZ1HH100DY		10p	50V	Ceramic	AB
C101	VCKYCZ1CB153KY		0.015	16V	Ceramic	AB
C103	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C104	VCKYCZ1AB104KY		0.1	10V	Ceramic	AB
C105	VCKYCZ1AB104KY		0.1	10V	Ceramic	AB
C106	VCKYCZ1AB104KY		0.1	10V	Ceramic	AB

Ref. No.	Part No.	★	Description	Code
C107	VCKYTV1CB105KY	1	16V Ceramic	AC
C108	VCKYCY0JB105KY	1	6.3V Ceramic	AC
C109	VCSATA0YJ156MY	15	6.3V Tantalum	AD
C110	VCKYCZ1EB103KY	0.01	25V Ceramic	AA
C111	RC-KZA144WJZZY	0.1	6.3V Ceramic	AB
C113	VCKYCZ1EB103KY	0.01	25V Ceramic	AA
C114	VCKYCZ1EB103KY	0.01	25V Ceramic	AA
C115	RC-KZA069WJZZY	4.7	10V Ceramic	AB
	RESISTORS			
R4	VRS-CZ1JF222JY	2.2k	1/16W Metal Oxide	AA
R25	VRS-CZ1JF000JY	0	1/16W Metal Oxide	AA
R30	VRS-CZ1JF101JY	100	1/16W Metal Oxide	AA
R37	VRS-CZ1JF102JY	1k	1/16W Metal Oxide	AA
R43	VRS-CZ1JF000JY	0	1/16W Metal Oxide	AA
R52	VRS-CZ1JF101DY	100	1/16W Metal Oxide	AA
R101	VRS-CZ1JF100JY	10	1/16W Metal Oxide	AA
R103	VRS-CZ1JF333JY	33k	1/16W Metal Oxide	AA
R1027	VRS-CZ1JF103JY	10k	1/16W Metal Oxide	AA
R1030	VRS-CZ1JF103JY	10k	1/16W Metal Oxide	AA
	BALUNE			
R22	RBLN-0257TAZZY	Balun, BLN-0257TA		AB
	MISCELLANEOUS PARTS			
SC1001	QCNCWA082WJZZY	Connector, 33Pin		AG
TP1001	QLUGZA001WJZZY	Lug		AB
TP1002	QLUGZA001WJZZY	Lug		AB
TP1003	QLUGZA001WJZZY	Lug		AB

DUNTKC368QA50(VL-Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))
DUNTKC368QA51(VL-Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))
SUB PWB UNIT

	INTEGRATED CIRCUITS			
IC503	VHiMB8346BV-1Y	MB8346BV		AN
IC551	VHiUPD16835-1Y	UPD16835		AM
IC600	VHiLA74212T-1Q	LA74212T		AS
IC2502	VHi10324AFV2EY	10324AFV2		AE
IC2901	VHiMM1332E/-1Y	MM1332E		AH
	TRANSISTORS			
Q552	VSKRC402E++-1Y	KRC402E++		AB
Q600	VSFMG12////-1Y	FMG12		AD
Q604	VSKRX203U++-1Y	KRX203U++		AB
Q2554	VSKTC4075EY-1Y	KTC4075EY		AB
Q2901	VSRTQ035P02-1Y	RTQ035P02		AD
Q2902	VSRTQ035P02-1Y	RTQ035P02		AD
Q2903	VSFDT458P++-1Y	FDT458P++		AE
Q2904	VSXP4213///-1Y	XP4213		AC
Q2905	VSKRC654U++-1Y	KRC654U++		AB
Q2906	VSXP4316///-1Y	XP4316		AC
	DIODES			
D551	VHD1SS400++-1Y	1SS400++		AB
D2902	VHDKDS121E+-1Y	KDS121E+		AB
D2904	VHDRB160M30-1Y	RB160M30		AC
VA501	RH-VXA003WJZZY	Varistor		AC
VA502	RH-VXA003WJZZY	Varistor		AC
	COILS			
L551	VPD9M100KR86NY	Peaking, 10µH		AC
L600	VPCEM470M3R7NY	Peaking, 47µH		AC
L601	VPBWM100KR50NY	Peaking, 10µH		AC
L2900	RCiLFA009WJZZY	Coil, CiLFA009WJ		AG
	CAPACITORS			
C507	VCKYCY1AF105ZY	1	10V Ceramic	AC
C521	VCKYCZ1HB102KY	1000p	50V Ceramic	AB
C522	VCKYCZ1HB102KY	1000p	50V Ceramic	AB
C523	VCKYCZ1HB102KY	1000p	50V Ceramic	AB
C524	VCKYCZ1HB102KY	1000p	50V Ceramic	AB
C525	VCKYCZ1HB102KY	1000p	50V Ceramic	AB
C551	RC-KZ0075TAZZY	2.2	16V Ceramic	AC
C552	VCKYCZ1EB103KY	0.01	25V Ceramic	AA
C553	VCCCCZ1HH330JY	33p	50V Ceramic	AB
C554	VCKYCZ1EB103KY	0.01	25V Ceramic	AA
C555	VCCCCZ1HH101JY	100p	50V Ceramic	AB
C556	VCKYCZ1EB103KY	0.01	25V Ceramic	AA
C557	VCCCCZ1HH101JY	100p	50V Ceramic	AB
C558	VCKYCZ1EB103KY	0.01	25V Ceramic	AA
C559	VCKYCZ1EB103KY	0.01	25V Ceramic	AA
C561	VCKYCZ1EB103KY	0.01	25V Ceramic	AA
C562	VCSATA0YJ106MY	10	Tantalum	AC
C573	VCKYCZ1HB221KY	220p	50V Ceramic	AA
C574	VCKYCZ1HB221KY	220p	50V Ceramic	AA
C575	VCCCCZ1HH221JY	220p	50V Ceramic	AB
C605	VCKYCZ1EB103KY	0.01	25V Ceramic	AA
C612	VCSATA0JJ336MY	33	6.3V Tantalum	AD
C614	VCKYCZ1AB104KY	0.1	10V Ceramic	AB
C616	VCKYCZ1HB102KY	1000p	50V Ceramic	AB
C618	VCKYCY1CB333KY	0.033	16V Ceramic	AA
C620	VCKYCZ1AB104KY	0.1	10V Ceramic	AB
C622	VCKYCZ1AB273KY	0.027	10V Ceramic	AB
C627	VCSATA0JJ336MY	33	6.3V Tantalum	AD
C629	VCKYCZ1AB104KY	0.1	10V Ceramic	AB
C630	RC-KZA030WJZZY	2.2	10V Ceramic	AB
C631	RC-KZA030WJZZY	2.2	10V Ceramic	AB
C635	VCKYCY1AB224KY	0.22	10V Ceramic	AB
C636	VCKYCZ1AB104KY	0.1	10V Ceramic	AB
C637	VCKYCY0JB105KY	1	6.3V Ceramic	AC
C638	VCKYCY1AB224KY	0.22	10V Ceramic	AB
C641	VCSATA0JJ336MY	33	6.3V Tantalum	AD
C642	VCSATE1AJ476MY	47	10V Tantalum	AD
C645	VCKYCZ1AB104KY	0.1	10V Ceramic	AB
C648	VCKYCZ1HB102KY	1000p	50V Ceramic	AB
C651	VCKYCZ1AB104KY	0.1	10V Ceramic	AB
C1470	VCKYCZ1HB102KY	1000p	50V Ceramic	AB
C1471	VCKYCZ1HB102KY	1000p	50V Ceramic	AB
C2514	RC-KZ0075TAZZY	2.2	16V Ceramic	AC
C2516	VCKYCY1AB224KY	0.22	10V Ceramic	AB
C2517	VCKYCZ1EB103KY	0.01	25V Ceramic	AA
C2518	VCKYCZ1HB102KY	1000p	50V Ceramic	AB
C2519	VCKYCZ1AB104KY	0.1	10V Ceramic	AB
C2520	VCCCCZ1HH151JY	150p	50V Ceramic	AB
C2521	VCKYCZ1EB103KY	0.01	25V Ceramic	AA
C2551	VCKYCZ1EB103KY	0.01	25V Ceramic	AA
C2901	VCKYCY1CB104KY	0.1	16V Ceramic	AB
C2902	VCKYTV1CF105ZY	1	16V Ceramic	AB
C2903	VCKYCY1CB104KY	0.1	16V Ceramic	AB
C2905	RC-KZA107WJZZY	1	25V Ceramic	AC
C2906	VCKYCY1CB104KY	0.1	16V Ceramic	AB
C2910	VCKYCY0JB105KY	1	6.3V Ceramic	AC
Q632	VCSATA0JJ106MY	10MFD	6.3V Tantalum	AD
	RESISTORS			
R551	VRS-CZ1JF000JY	0	1/16W Metal Oxide	AA
R552	VRS-CZ1JF123JY	12k	1/16W Metal Oxide	AA
R553	VRS-CZ1JF104JY	100k	1/16W Metal Oxide	AA
R554	VRS-CZ1JF5R6JY	5.6	1/16W Metal Oxide	AA
R555	VRS-CZ1JF5R6JY	5.6	1/16W Metal Oxide	AA
R557	VRS-CZ1JF5R6JY	5.6	1/16W Metal Oxide	AA
R559	VRS-CZ1JF5R6JY	5.6	1/16W Metal Oxide	AA
R572	VRS-CZ1JF223JY	22k	1/16W Metal Oxide	AA
R573	VRS-CZ1JF223JY	22k	1/16W Metal Oxide	AA
R578	VRS-CZ1JF181JY	180	1/16W Metal Oxide	AA
R581	VRS-CZ1JF562JY	5.6k	1/16W Metal Oxide	AA
R582	VRS-CZ1JF181JY	180	1/16W Metal Oxide	AA
R602	VRS-CZ1JF472JY	4.7k	1/16W Metal Oxide	AA
R606	VRS-CZ1JF222JY	2.2k	1/16W Metal Oxide	AA
R620	VRS-CZ1JF123JY	12k	1/16W Metal Oxide	AA
R621	VRS-CZ1JF123JY	12k	1/16W Metal Oxide	AA
R625	VRS-CZ1JF333JY	33k	1/16W Metal Oxide	AA
R627	VRS-CZ1JF103JY	10k	1/16W Metal Oxide	AA
R629	VRS-CZ1JF103JY	10k	1/16W Metal Oxide	AA
R630	VRS-CZ1JF153JY	15k	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
R631	VRS-CZ1JF000JY		0 1/16W Metal Oxide	AA
R632	VRS-CZ1JF683JY		68k 1/16W Metal Oxide	AA
R633	VRS-CZ1JF393JY		39k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R634	VRS-CZ1JF393JY		39k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R635	VRS-CZ1JF682JY		6.8k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R636	VRS-CZ1JF682JY		6.8k 1/16W Metal Oxide (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AA
R637	VRS-CZ1JF561JY		560 1/16W Metal Oxide	AA
R638	VRS-CZ1JF561JY		560 1/16W Metal Oxide	AA
R639	VRS-CZ1JF683JY		68k 1/16W Metal Oxide	AA
R641	VRS-CZ1JF106JY		10M 1/16W Metal Oxide	AA
R642	VRS-CZ1JF106JY		10M 1/16W Metal Oxide	AA
R643	VRS-CZ1JF106JY		10M 1/16W Metal Oxide	AA
R645	VRS-CZ1JF103JY		10k 1/16W Metal Oxide	AA
R651	VRS-CZ1JF562JY		5.6k 1/16W Metal Oxide	AA
R659	VRS-CZ1JF681JY		680 1/16W Metal Oxide	AA
R2508	VRS-CZ1JF622DY		6.2k 1/16W Metal Oxide	AA
R2509	VRS-CZ1JF104DY		100k 1/16W Metal Oxide	AA
R2510	VRS-CZ1JF822DY		8.2k 1/16W Metal Oxide	AA
R2511	VRS-CZ1JF223JY		22k 1/16W Metal Oxide	AA
R2512	VRS-CZ1JF105JY		1M 1/16W Metal Oxide	AA
R2513	VRS-CZ1JF153DY		15k 1/16W Metal Oxide	AA
R2514	VRS-CZ1JF153JY		15k 1/16W Metal Oxide	AA
R2515	VRS-CZ1JF153JY		15k 1/16W Metal Oxide	AA
R2516	VRS-CZ1JF154JY		150k 1/16W Metal Oxide	AA
R2520	VRS-CZ1JF122JY		1.2k 1/16W Metal Oxide	AA
R2523	VRS-CZ1JF471JY		470 1/16W Metal Oxide	AA
R2525	VRS-CZ1JF474JY		470k 1/16W Metal Oxide	AA
R2526	VRS-CZ1JF222JY		2.2k 1/16W Metal Oxide	AA
R2527	VRS-CZ1JF472JY		4.7k 1/16W Metal Oxide	AA
R2528	VRS-CZ1JF682JY		6.8k 1/16W Metal Oxide	AA
R2530	VRS-CZ1JF474JY		470k 1/16W Metal Oxide	AA
R2531	VRS-CZ1JF682JY		6.8k 1/16W Metal Oxide	AA
R2533	VRS-CZ1JF100JY		10 1/16W Metal Oxide	AA
R2559	VRS-CZ1JF180JY		18 1/16W Metal Oxide	AA
R2560	VRS-CZ1JF682JY		6.8k 1/16W Metal Oxide	AA
R2561	VRS-CZ1JF472JY		4.7k 1/16W Metal Oxide	AA
R2903	VRS-CZ1JF104JY		100k 1/16W Metal Oxide	AA
R2905	VRS-CZ1JF105JY		1M 1/16W Metal Oxide	AA
R2906	VRS-CZ1JF105JY		1M 1/16W Metal Oxide	AA
R2908	VRS-TV2BDR15JY		0.15 1/8W Metal Oxide	AA
R2909	VRS-TV1JD1R5JY		1.5 1/16W Metal Oxide	AA
R2910	VRS-CZ1JF224DY		220k 1/16W Metal Oxide	AA
R2911	VRS-CZ1JF101JY		100 1/16W Metal Oxide	AA
R2913	VRS-TW2HF181JY		180 1/2W Metal Oxide	AA
R2914	VRS-CZ1JF224DY		220k 1/16W Metal Oxide	AA
R2915	VRS-CZ1JF823DY		82k 1/16W Metal Oxide	AA
R2916	VRS-CZ1JF823DY		82k 1/16W Metal Oxide	AA
R2917	VRS-CZ1JF474JY		470k 1/16W Metal Oxide	AA
R2918	VRS-CZ1JF474JY		470k 1/16W Metal Oxide	AA
R7426	VRS-CY1JF000JY		0 1/16W Metal Oxide	AA
R7427	VRS-CY1JF000JY		0 1/16W Metal Oxide	AA
R7428	VRS-CY1JF000JY		0 1/16W Metal Oxide	AA
R7429	VRS-CY1JF000JY		0 1/16W Metal Oxide	AA
BALUNES				
FB1478	RBLN-0083GEZZY		Balun, BLN-0083GE	AB
FB1479	RBLN-0083GEZZY		Balun, BLN-0083GE	AB
FB1480	RBLN-0083GEZZY		Balun, BLN-0083GE	AB
MISCELLANEOUS PARTS				
⚠ CP1	QFS-LA006WJZZY		Fuse, 0.8A 36V	AC
⚠ CP2	QFS-LA009WJZZY		Fuse, 1.6A 36V	AC
⚠ CP3	QFS-LA009WJZZY		Fuse, 1.6A 36V	AC
J1401	QJAKEA050WJZZY		Jack, 8Pin	AH
J2900	QJAKC0006TAZZ		Jack, 3Pin	AE
J7401	QJAKZA007WJZZ		Jack, 4Pin	AE
P900	QTANBA002WJZZ		Terminal, 3Pin	AF
P3602	QPLGN0474TAZZY		Plug, 4Pin	AD
P2901	QCNCM8058TAZZY		Connector, 80Pin	AG
SC501	QCNCWA036WJZZY		Connector, 15Pin	AD
SC551	QCNCWA039WJZZY		Connector, 25Pin	AE
	PSLDMA394WJZZ		Shield	AD

DUNTKC118QA01
LCD PWB UNIT

INTEGRATED CIRCUITS			
IC802	VHiNC7NZ04K-1Y	NC7NZ04K	AD
IC804	VHiNC7WZ08K-1Y	NC7WZ08K	AD
IC9800	VHiTA75S01F-1Y	TA75S01F	AD
TRANSISTORS			
Q802	VS3LN01S///-1Y	3LN01S	AC
Q9800	VSCPH5504++-1Y	CPH5504++	AE
Q9801	VSKTX101UY+-1Y	SKTX101UY+	AB
Q9802	VSKTC4075EY-1Y	KTC4075EY	AB
DIODES			
D800	RH-EXA095WJZZY	Zener Diode, EXA095WJ	AB
D9800	RH-EXA089WJZZY	Zener Diode, EXA089WJ	AB
COILS AND TRANSFORMER			
L800	VPD9M100KR86NY	Peaking, 10μH	AC
L9800	RCiLPA051WJZZY	Coil, 33μH	AD
L9801	VPCGM100MR25NY	Peaking, 10μH	AB
⚠ T9800	RTRNZA053WJZZY	Transformer	AK

CAPACITORS					
C806	VCKYCY0JB105KY	1	6.3V	Ceramic	AC
C807	VCKYCZ1EB103KY	0.01	25V	Ceramic	AA
C816	VCKYTV1CB105KY	1	16V	Ceramic	AC
C818	RC-KZA111WJZZY	1	25V	Ceramic	AC
C820	VCKYCZ1AF104ZY	0.1	10V	Ceramic	AB
C821	RC-KZA030WJZZY	2.2	10V	Ceramic	AB
C9800	RC-KZA041WJZZY	10	10V	Ceramic	AC
C9801	VCKYCZ1AF104ZY	0.1	10V	Ceramic	AB
C9802	VCKYCZ1EB103KY	0.01	25V	Ceramic	AA
C9803	RC-KZA124WJZZY	0.22	50V	Ceramic	AD
C9804	VCKYCY1HB332KY	3300p	50V	Ceramic	AA
C9805	RC-KZA052WJZZY	18	3kV	Ceramic	AD
C9807	VCKYCZ1AB104KY	0.1	10V	Ceramic	AB

RESISTORS					
R819	VRS-CZ1JF103JY	10k	1/16W	Metal Oxide	AA
R825	VRS-CZ1JF223JY	22k	1/16W	Metal Oxide	AA
R826	VRS-CZ1JF273JY	27k	1/16W	Metal Oxide	AA
R827	VRS-CZ1JF124JY	120k	1/16W	Metal Oxide	AA
R9800	VRS-CZ1JF152JY	1.5k	1/16W	Metal Oxide	AA
R9801	VRS-CZ1JF152JY	1.5k	1/16W	Metal Oxide	AA
R9802	VRS-CZ1JF182DY	1.8k	1/16W	Metal Oxide	AA
R9803	VRS-CZ1JF103DY	10k	1/16W	Metal Oxide	AA
R9804	VRS-CZ1JF473JY	47k	1/16W	Metal Oxide	AA
R9805	VRS-CZ1JF271DY	270	1/16W	Metal Oxide	AA
R9806	VRS-CZ1JF271DY	270	1/16W	Metal Oxide	AA
R9807	VRS-CZ1JF101JY	100	1/16W	Metal Oxide	AA
R9808	VRS-CZ1JF103JY	10k	1/16W	Metal Oxide	AA
R9809	VRS-CZ1JF473JY	47k	1/16W	Metal Oxide	AA
R9810	VRS-CY1JFR22JY	0.22	1/16W	Metal Oxide	AA
R9811	VRS-CZ1JF102DY	1k	1/16W	Metal Oxide	AA
R9812	VRS-CZ1JF153DY	15k	1/16W	Metal Oxide	AA
MISCELLANEOUS PARTS					
SC800	QSOCN1892TAZZY	Socket, 18Pin			AD
SC801	QSOCN1892TAZZY	Socket, 18Pin			AD
SC802	QSOCN2492TAZZY	Socket, 24Pin			AE
SC803	QCNCW0694TAZZY	Connector, 6Pin			AD
SC9800	QSOCN1019TAN1Y	Socket, 10Pin			AG
	PSPAZA272WJZZ	Spacer			AB

DUNTKC369QA00
HEAD AMP PWB UNIT

INTEGRATED CIRCUITS

Ref. No.	Part No.	★	Description	Code
IC301	VHiLA70050W-1Y		LA70050W	AQ
IC351	VHiPT8146++-1Y		PT8146++	AH
IC1701	VHiLB11993F-1Y		LB11993F	AS

TRANSISTORS

Ref. No.	Part No.	★	Description	Code
Q301	VS2SC4738Y/-1Y		2SC4738Y	AA
Q302	VS2SC4738Y/-1Y		2SC4738Y	AA
Q351	VSXP1111+++-1Y		XP1111+++	AB
Q352	VSXP0431N++-1Y		XP0431N++	AB
Q1701	VSXP6501///-1Y		XP6501	AC

COILS

Ref. No.	Part No.	★	Description	Code
L301	VPAWM4R7MR70NY		Peaking, 4.7µH	AB
L1701	VPD9M100KR86NY		Peaking, 10µH	AC
L1702	VPD9M4R7MR53NY		Peaking, 4.7µH	AB

CAPACITORS

Ref. No.	Part No.	★	Description			Code
C301	VCCCCZ1HH5R0CY		5p	50V	Ceramic	AA
C302	VCCCCZ1HH5R0CY		5p	50V	Ceramic	AA
C303	VCKYCZ1AB104KY		0.1	10V	Ceramic	AB
C306	VCKYCZ1AB104KY		0.1	10V	Ceramic	AB
C308	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C309	VCSATE1AJ476MY		47	10V	Tantalum	AD
C311	VCKYCZ1AB104KY		0.1	10V	Ceramic	AB
C312	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C313	RC-KZA069WJZZY		4.7	10V	Ceramic	AB
C314	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C315	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C316	VCKYCZ1HB471KY		470p	50V	Ceramic	AB
C317	VCKYCZ1HB471KY		470p	50V	Ceramic	AB
C318	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C319	VCKYCZ1AB104KY		0.1	10V	Ceramic	AB
C320	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C321	VCCCCZ1HH101JY		100p	50V	Ceramic	AB
C322	VCKYCZ1AB104KY		0.1	10V	Ceramic	AB
C323	VCKYCZ1CB822KY		8200p	16V	Ceramic	AB
C324	VCKYCZ1EB103KY		0.01	25V	Ceramic	AA
C351	VCKYCY1AF105ZY		1	10V	Ceramic	AC
C352	VCCCCZ1HH101JY		100p	50V	Ceramic	AB
C353	VCCCCZ1HH101JY		100p	50V	Ceramic	AB
C354	VCKYCY1AF105ZY		1	10V	Ceramic	AC
C1701	VCKYCZ1HB222KY		2200p	50V	Ceramic	AB
C1702	VCKYCZ1HB222KY		2200p	50V	Ceramic	AB
C1703	VCKYCY0JB105KY		1	6.3V	Ceramic	AC
C1704	VCKYCY1AF105ZY		1	10V	Ceramic	AC
C1705	VCKYCZ1AB104KY		0.1	10V	Ceramic	AB
C1706	VCKYCZ1AF104ZY		0.1	10V	Ceramic	AB
C1707	VCKYCZ1AF104ZY		0.1	10V	Ceramic	AB
C1708	RC-KZA030WJZZY		2.2	10V	Ceramic	AB
C1709	VCKYCZ1AF104ZY		0.1	10V	Ceramic	AB
C1710	VCKYCZ1AF104ZY		0.1	10V	Ceramic	AB
C1711	VCKYCY0JB105KY		1	6.3V	Ceramic	AC
C1712	VCKYCZ1AF104ZY		0.1	10V	Ceramic	AB
C1713	VCKYCZ1HB102KY		1000p	50V	Ceramic	AB
C1714	VCKYCZ1AF104ZY		0.1	10V	Ceramic	AB
C1715	VCKYCZ1HB102KY		1000p	50V	Ceramic	AB
C1716	VCKYCZ1HB102KY		1000p	50V	Ceramic	AB
C1717	VCKYCZ1AF104ZY		0.1	10V	Ceramic	AB
C1718	VCKYCZ1AF104ZY		0.1	10V	Ceramic	AB
C1719	VCKYCY1AF105ZY		1	10V	Ceramic	AC
C1720	VCKYCZ1AF104ZY		0.1	10V	Ceramic	AB
C1721	VCKYCY1AF105ZY		1	10V	Ceramic	AC
C1722	VCKYCY1EB473KY		0.047	25V	Ceramic	AA
C1723	VCKYCZ1EB472KY		4700p	25V	Ceramic	AB
C1724	VCKYCY1AF105ZY		1	10V	Ceramic	AC
C1725	VCKYCZ1AF104ZY		0.1	10V	Ceramic	AB
C1726	VCKYCZ1AF104ZY		0.1	10V	Ceramic	AB
C1727	VCCCCZ1HH101JY		100p	50V	Ceramic	AB
C1728	VCKYCY1AF105ZY		1	10V	Ceramic	AC

RESISTORS

Ref. No.	Part No.	★	Description			Code
R302	VRS-CZ1JF183JY		18k	1/16W	Metal Oxide	AA
R303	VRS-CZ1JF822JY		8.2k	1/16W	Metal Oxide	AA
R304	VRS-CZ1JF222JY		2.2k	1/16W	Metal Oxide	AA
R305	VRS-CZ1JF272JY		2.7k	1/16W	Metal Oxide	AA
R306	VRS-CZ1JF153JY		15k	1/16W	Metal Oxide	AA
R309	VRS-CZ1JF473DY		47k	1/16W	Metal Oxide	AA
R311	VRS-CZ1JF102JY		1k	1/16W	Metal Oxide	AA
R312	VRS-CZ1JF102JY		1k	1/16W	Metal Oxide	AA
R314	VRS-CZ1JF102JY		1k	1/16W	Metal Oxide	AA
R319	VRS-CZ1JF563JY		56k	1/16W	Metal Oxide	AA
R320	VRS-CZ1JF123JY		12k	1/16W	Metal Oxide	AA
R352	VRS-CZ1JF104JY		100k	1/16W	Metal Oxide	AA
R353	VRS-CZ1JF102JY		1k	1/16W	Metal Oxide	AA
R354	VRS-CZ1JF102JY		1k	1/16W	Metal Oxide	AA
R356	VRS-CZ1JF104JY		100k	1/16W	Metal Oxide	AA
R357	VRS-CZ1JF104JY		100k	1/16W	Metal Oxide	AA
R358	VRS-CZ1JF104JY		100k	1/16W	Metal Oxide	AA
R360	VRS-CZ1JF221JY		220	1/16W	Metal Oxide	AA
R364	VRS-CZ1JF221JY		220	1/16W	Metal Oxide	AA
R366	VRS-CZ1JF104JY		100k	1/16W	Metal Oxide	AA
R1700	VRS-CZ1JF151JY		150	1/16W	Metal Oxide	AA
R1701	VRS-CZ1JF151JY		150	1/16W	Metal Oxide	AA
R1702	VRS-CZ1JF182JY		1.8k	1/16W	Metal Oxide	AA
R1703	VRS-CZ1JF182JY		1.8k	1/16W	Metal Oxide	AA
R1704	VRS-CZ1JF103JY		10k	1/16W	Metal Oxide	AA
R1705	VRS-CZ1JF563JY		56k	1/16W	Metal Oxide	AA
R1706	VRS-CZ1JF473JY		47k	1/16W	Metal Oxide	AA
R1707	VRS-CZ1JF103JY		10k	1/16W	Metal Oxide	AA
R1708	VRS-CZ1JF1R0JY		1	1/16W	Metal Oxide	AA
R1709	VRS-CZ1JF1R0JY		1	1/16W	Metal Oxide	AA
R1710	VRS-CZ1JF1R0JY		1	1/16W	Metal Oxide	AA
R1711	VRS-CZ1JF1R0JY		1	1/16W	Metal Oxide	AA
R1712	VRS-CZ1JF105JY		1M	1/16W	Metal Oxide	AA
R1713	VRS-CZ1JF331JY		330	1/16W	Metal Oxide	AA
R1714	VRS-CZ1JF621JY		620	1/16W	Metal Oxide	AA
R1715	VRS-CZ1JF103JY		10k	1/16W	Metal Oxide	AA
R1716	VRS-CZ1JF223JY		22k	1/16W	Metal Oxide	AA
R1717	VRS-CZ1JF330JY		33	1/16W	Metal Oxide	AA
R1718	VRS-CZ1JF102JY		1k	1/16W	Metal Oxide	AA
R1719	VRS-CZ1JF103JY		10k	1/16W	Metal Oxide	AA
R1722	VRS-CZ1JF102JY		1k	1/16W	Metal Oxide	AA
R1723	VRS-CZ1JF182JY		1.8k	1/16W	Metal Oxide	AA
R1724	VRS-CZ1JF182JY		1.8k	1/16W	Metal Oxide	AA
R1726	VRS-CZ1JF330JY		33	1/16W	Metal Oxide	AA
R1727	VRS-CZ1JF103JY		10k	1/16W	Metal Oxide	AA
R1728	VRS-CZ1JF102JY		1k	1/16W	Metal Oxide	AA
R1729	VRS-CZ1JF822JY		8.2k	1/16W	Metal Oxide	AA
R1730	VRS-CZ1JF102JY		1k	1/16W	Metal Oxide	AA

MISCELLANEOUS PARTS

Ref. No.	Part No.	★	Description	Code
P301	QPLGN0576TAZZY		Plug, 5Pin	AC
SC301	QSOCN1092TAZZY		Socket, 10Pin	AD
SC303	QSOCN1092TAZZY		Socket, 10Pin	AD
SC304	QSOCN0706TAN1Y		Socket, 7Pin	AE
SC305	QCNCWA037WJZZY		Connector, 21Pin	AD
SC306	QCNCWA081WJZZY		Connector, 27Pin	AG
SC307	QCNCWA041WJZZY		Connector, 33Pin	AE
SC308	QCNCWA041WJZZY		Connector, 33Pin	AE
SC310	QSOCN1292TAZZY		Socket, 12Pin	AD
SC311	QSOCN1005TAN1Y		Socket, 10Pin	AE
TP301	QLUGZA001WJZZY		Lug	AB
TP302	QLUGZA001WJZZY		Lug	AB

Ref. No.	Part No.	★	Description	Code

DUNTKC370PM00(VL-Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))
DUNTKC370PM01(VL-Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))
OPERATION PWB UNIT

CAPACITORS

C2001	VCKYCZ1HB102KY	1000p	50V	Ceramic	AB
C2002	VCKYCZ1HB102KY	1000p	50V	Ceramic	AB
C2003	VCKYCZ1HB102KY	1000p	50V	Ceramic	AB
C2004	VCKYCZ1HB102KY	1000p	50V	Ceramic	AB
C2005	VCKYCZ1HB102KY	1000p	50V	Ceramic	AB
C2006	VCKYCZ1HB102KY	1000p	50V	Ceramic	AB
C2007	VCKYCZ1HB102KY	1000p	50V	Ceramic	AB
C2008	VCKYCZ1HB102KY	1000p	50V	Ceramic	AB
C2009	VCKYCZ1HB102KY	1000p	50V	Ceramic	AB
C2010	VCKYCY1HB332KY	3300p	50V	Ceramic	AA
C2011	VCKYCY1HB332KY	3300p	50V	Ceramic	AA

MISCELLANEOUS PARTS

SC2002	QSOCN0907REN1Y	Socket, 9Pin	AD
SW2001	QSW-K0100TAZZY	Switch	AC
SW2002	QSW-KA013WJZZ	Switch (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AL
SW2002	QSW-KA015WJZZ	Switch (Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))	AL
SW2007	QSW-K0100TAZZY	Switch	AC

DUNTKC371PM01
LITHIUM PWB UNIT

CAPACITORS

C5800	VCKYCZ1AF104ZY	0.1	10V	Ceramic	AB
C5802	VCKYCZ1AF104ZY	0.1	10V	Ceramic	AB
C5803	VCKYCZ1EB103KY	0.01	25V	Ceramic	AA
C5804	VCKYCZ1EB103KY	0.01	25V	Ceramic	AA

RESISTORS

R5800	VRS-CZ1JF000JY	0	1/16W	Metal Oxide	AA
R5801	VRS-CZ1JF224JY	220k	1/16W	Metal Oxide	AA
R5802	VRS-CZ1JF224JY	220k	1/16W	Metal Oxide	AA
R5803	VRS-CZ1JF224JY	220k	1/16W	Metal Oxide	AA
R5804	VRS-CZ1JF334JY	330k	1/16W	Metal Oxide	AA
R5805	VRS-CZ1JF334JY	330k	1/16W	Metal Oxide	AA
R5806	VRS-CZ1JF334JY	330k	1/16W	Metal Oxide	AA
R5807	VRS-CZ1JF330JY	33	1/16W	Metal Oxide	AA
R5808	VRS-CZ1JF330JY	33	1/16W	Metal Oxide	AA
R5809	VRS-CZ1JF330JY	33	1/16W	Metal Oxide	AA
R5810	VRS-CZ1JF000JY	0	1/16W	Metal Oxide	AA

MISCELLANEOUS PARTS

RDA5800	QTANZA012WJZZY	Terminal, 2Pin	AE
SC5800	QCNCWA039WJZZY	Connector, 25Pin	AE
SC5801	QCNCW1895TAZZY	Connector, 17Pin	AE
SW5800	QSW-MA001WJZZY	Switch, LCD Close	AD

DUNTKC372PM00
MECHA REVERSION DETECTION PWB UNIT

MISCELLANEOUS PARTS

SW2300	QSW-M0018TAZZY	Switch	AC
	QCNW-B172WJZZ	Connecting Cord	AD

Ref. No.	Part No.	★	Description	Code

DUNTKC373PM02
VCR OPERATION PWB UNIT

DIODES AND LED'S

LED2101	RH-PXA038WJZZY	PhotoDI, ODE	AC
LED2102	RH-PXA037WJZZY	PhotoDI, ODE	AB

CAPACITORS

C2101	VCKYCZ1HB102KY	1000p	50V	Ceramic	AB
C2102	VCKYCZ1HB102KY	1000p	50V	Ceramic	AB

RESISTORS

R2101	VRS-CZ1JF102JY	1k	1/16W	Metal Oxide	AA
R2102	VRS-CZ1JF102JY	1k	1/16W	Metal Oxide	AA

MISCELLANEOUS PARTS

SC2101	QSOCN1292TAZZY	Socket, 12Pin	AD
SW2102	QSW-S0210TAZZY	Switch	AD
SW2103	QSW-MA005WJZZY	Switch	AD
SW2104	QSW-K0100TAZZY	Switch	AC
SW2105	QSW-K0100TAZZY	Switch	AC

DUNTKC374PM00
ZOOM SW PWB UNIT

CONTROL

VR2201	RVR-VA001WJZZY	Variable Resistor	AG

CAPACITORS

C2201	VCKYCZ1AF104ZY	0.1	10V	Ceramic	AB
C2202	VCKYCZ1AF104ZY	0.1	10V	Ceramic	AB

MISCELLANEOUS PARTS

P2201	QPLGN0276TAZZY	Plug, 2Pin	AD
SC2201	QSOCN1006TAN1Y	Socket, 10Pin	AE
SW2201	QSW-K0097TAZZY	Switch, Zoom	AD

MECHANISM PARTS

Ref. No.	Part No.	★	Description	Code
300	CCHSMA013WJ02		Mecha Chassis Service	BQ
301	LCHSMA013WJZZ		Main Chassis Ass'y	AQ
302	QSW-RA002WJZZ		Mode SW	AF
303	QPWBHB546WJZZ		LM/Mode FPC	AG
304	NGERHA001WJFW		Main Cam	AD
305	MLEVFA007WJFW		Ejection Lever	AD
306	NGERHA002WJFW		Sub Cam	AD
307	MLEVFA002WJFW		SL Drive Lever	AD
308	MLEVFA004WJFW		S brake Operating Lever	AC
309	MLEVFA003WJFW		T arm Operating Lever	AE
310	PGiDMA003WJZZ		SLA Support	AC
311	RMOTMA002WJZZ		L Motor Ass'y	AN
312	RDTCH0039GEZZ		Dew Sensor	AD
313	PGiDMA002WJZZ		TLA Support	AC
314	NGERHA007WJZZ		Center Gear	AE
315	RMOTVA001WJZZ		Capstan Motor Ass'y	AY
316	NPLYVA001WJZZ		Relay Pulley	AD
317	CGiDMA012WJ01		Drum Base Ass'y	AN
318	CARMMA003WJ02		Tu Pole Base Loading Arm Ass'y	AP
319	NGERHA005WJZZ		Tu Loading Gear	AC
320	MSPRDA009WJFJ		Tu Press SPR	AC
321	CARMMA001WJ01		S Pole Base Loading Arm Ass'y	AQ
322	NGERHA004WJZZ		S Loading Gear	AC
323	MSPRDA008WJFJ		S Press SPR	AC
324	NGERHA006WJZZ		Loading Drive Gear	AD
325	PGiDMA001WJZZ		Guide Rail	AC
326	MLEVFA005WJZZ		Pinch Press Lever Ass'y	AG
327	MSPRTA002WJFJ		Pinch Press SPR	AC
328	MSPRDA007WJFJ		Pinch Lever Return SPR	AC
329	MLEVFA014WJZZ		Pinch Lever Ass'y	AQ
341	CCHSSA001WJ01		Sensor FPC Affixing Slide Chassis Ass'y	BC
342	LANGGA012WJFW		Slide Adjustment ANG	AC
343	LANGJA001WJFW		T-SPR Adjustment ANG	AC
344	MSPRDA010WJFJ		Tu guide Arm SPR	AC
345	MLEVFA012WJZZ		Tu guide Arm Ass'y	AG
346	MSPRCA022WJFJ		Guide Adjustment SPR	AC
347	PGiDSA003WJFW		Tu Guide Flange	AC
348	PGiDPA001WJFW		Tu Guide	AD
349	LX-NZ0102GEFW		Guide Nut	AC
350	MLEVFA011WJFW		VSR Brake Lever	AE
351	NGERHA008WJZZ		T Brake Gear	AE
352	MLEVPA003WJZZ		T Main Brake	AC
353	NDAiVA001WJZZ		S Reel Table Ass'y	AL
354	NDAiVA002WJZZ		Tu Reel Table Ass'y	AL
355	MLEVPA002WJZZ		S Main Brake	AE
356	MSPRTA004WJFJ		S Brake SPR	AC
357	CLEVFA009WJ01		Tension Arm Ass'y	AK
358	LBNDKA001WJZZ		Tension Band Ass'y	AE
359	MSPRTA011WJFJ		T Arm SPR	AC
371	MARMMA005WJZZ		Swing Arm Ass'y	AG
372	LANGFA011WJZZ		Reel Cover Ass'y	AG
373	LANGGA013WJFW		Down Guide	AF
374	PCOVPA009WJZZ		Cassette Lid	AC
375	TLABHA012WJZZ		Cassette Control Caution Label	AC
376	TLABHA015WJZZ		Cassette Control Lock Label	AC
377	DDRMVA001WJ03		Drum Ass'y	BN
400	LX-BZ3131GEFN		Special Screw M1.4 x L1.6	AA
401	LX-HZ3089GEFF		S Tight M1.4 x 2	AA
402	LX-HZ3076GEFF		S Tight M1.4 x 3	AA
403	LX-BZA016WJFF		Special Screw M1.4 x L2.0	AC
404	LX-BZA015WJFF		Special Screw M1.4 x L1.5	AC
405	LX-BZ3135GEFF		Precision Type2 M1.4 x L1	AA
406	LX-BZA017WJFF		L Motor Installation Screw	AC
407	LX-BZ3159GEFF		Precision Type2 M1.7 x L2.5	AA
408	LX-WZ1029GE00		CW ø 1.2 ø 3t0.25	AA
409	LX-WZ1052GE00		CW ø 0.7 ø 1.8t0.2	AA
410	XWHJZ21-02040		W ø 2.1 ø 4.0t0.25	AA
411	MSPRCA037WJFJ		TP Adjustment Spring	AB
412	PGiDSA004WJFW		TP Bottom Flange	AD
413	PGiDPA002WJFW		T Post	AE
414	PGiDSA005WJFW		TP Top Flange	AD
415	LX-WZA018WJ09		CW 1.2 3 T0.25(Lumirror)	AA

CASSETTE CONTROL PARTS

Ref. No.	Part No.	★	Description	Code
200	CHLDXA002WJ01		Cassette Control Ass'y	AQ
201	LHLDXA002WJZZ		Housing Ass'y	AN
202	MSPRTA005WJFJ		UP-SPR-R	AC
203	MSPRTA008WJFJ		UP-SPR-L	AC

CABINET PARTS LIST

Ref. No.	Part No.	★	Description	Code
1-1	GCOVHA035WJKA		Adjusting Cover	AG
2-1	GCABAA246WJKG		Camera R Cabinet	AK
2-2	LANGKA120WJFW		PWB Mounting Angle	AG
3	CCABBA337WJK6		KS Camera L Cabinet (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AQ
3	CCABBA337WJK7		KS Camera L Cabinet (Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))	AQ
3-2	HDECPA015WJSA		SHARP Nameplate	AB
3-3	JBTN-A129WJSA		Display Button (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AE
3-3	JBTN-A153WJSA		Display Button (Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))	AC
3-4	PSPAZA185WJZZ		LCD Spacer	AB
3-5	JKNBPA010WJSA		Battery Lock Knob	AE
3-6	LANGKA156WJFW		Pop-up Cover Fitting	AD
3-7	LHLDZA147WJSA		Battery Lock Holder	AD
3-8	MSPRCA019WJFJ		Battery Lock Spring	AA
3-9	MSPRCA025WJFJ		Pop-up Cover Spring	AA
3-10	PSPAHA138WJZZ		Top Face Sliding Spacer	AB
3-11	PSPAZA259WJZZ		Top Face Sliding Spacer B	AB
3-12	GCOVAA319WJSA		Pop-up Cover	AC
4	CCABCA015WJK1		KS Terminal Cabinet	AL
4-2	GCOVAA610WJSA		Terminal Cover	AE
5	CCOVAA785WJK1		KS Camera Front Cover	AM
5-2	GCOVAA322WJKA		Lens Cover	AF
5-3	GCOVAA613WJSA		Remote Control Cover C	AD
5-4	GCOVAA618WJKH		Microphone Grill	AD
5-5	HiNDPA696WJSA		Lens Cover Nameplate	AD
5-6	PCOVPA020WJZZ		Microphone Blind Sheet	AB
5-7	QEARPA086WJFJ		Microphone Earth Panel	AC
5-9	RMiCCA010WJZZ		Microphone Cell	AK
5-10	PSHEZA012WJZZ		Microphone Lead Sheet B	AB
6-1	GCOVAA379WJKH		Camera Top Cover	AK
6-3	LANGKA151WJFW		Top Face Cover Fitting	AF
7	GCOVAA373WJKP		Camera Bottom Cover A	AD
7-2	LANGKA159WJZZ		Bottom Cover Angle B	AH
8-1	GCOVAA330WJSA		VF Dust Removing Window Cover	AC
8-2	GCOVAA617WJSA		VF Eye Cap	AH
8-3	GCOVAA619WJSA		VF Eye Cap Fixing Cover	AD
8-4	GCOVAA620WJSA		VF Slide Top Cover	AE
8-5	GCOVAA621WJSA		VF Slide Bottom Cover	AE
8-7	JKNBPA011WJSA		VF Diopter Scale Knob	AC
8-8	LANGGA040WJ00		VF Slide Angle	AK
8-9	LANGKA213WJFW		VF Fitting Angle	AC
8-10	LHLDZA154WJKA		VF Slide Support Holder	AD
8-11	LHLDZA295WJZZ		VF Eyepiece Holder	AD
8-12	LHLDZA318WJZZ		VF Diopter Scale Knob Holder	AD
8-13	MSPRPA021WJFJ		VF Diopter Scale Knob Spring	AC
8-14	PLNSVA002WJNA		VF Lens	AG
8-17	QEARPA087WJFW		VF PWB Earth Panel	AC
8-18	QPWBHC376WJZZ		VF FPC	AF
8-19	RLCUCA004WJZZ		VF LCD Unit	BG
9-1-2	LANGKA125WJFW		Lens Fixing Bracket A	AF
10-1-1	LANGKA117WJFW		LCD Shield Case	AF
10-1-2	PSHEPA072WJZZ		Lightproof Sheet	AF
10-1-3	PTPEHA017WJZZ		LCD Fitting Tape	AC
10-2	CCABDA015WJKB		KS LCD Cabinet (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AL
10-2	CCABDA015WJKF		KS LCD Cabinet (Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))	AL
10-2-2	HDECPA013WJSA		LCD Decoration Plate (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AC
10-2-2	HDECPA014WJSA		LCD Decoration Plate (Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))	AC
10-2-3	PSHEPA099WJZZ		LCD Cabinet Attachment (KS Attachment)	AB
10-3-1	GCOVAA314WJKH		LCD Tilt Cover(Upper)	AF
10-3-2	GCOVAA312WJKH		LCD Tilt Cover(Lower)	AD
10-3-3	LANGKA119WJZZ		LCD Tilt Unit	AX
10-3-4	QPWBHB736WJZZ		LCD Tilt FPC	AR
10-3-5	TMAGTA001WJZZ		Magnet	AD
10-4	CLMPVA003LM01		Lamp Unit	
10-6	DUNTKC118QA01		LCD PWB Unit	—
10-7	GCOVAA313WJKM		LCD Front Cover	AK
10-8	LANGKA118WJFW		LCD Shield Case (Front)	AF
10-9	PGiDM0036TAZZ		Optical Waveguide	AG
10-10	PMiR-A022WJZZ		Reflection Sheet	AC
10-11	PSHEPA076WJZZ		DBEF Sheet	AG
10-12	PSHEPA087WJZZ		Prism Sheet	AF
10-13	PSHEPA092WJZZ		Diffusion Sheet	AD
10-14	PSLDMA283WJZZ		Shield Sheet	AC
10-15	RLCDVA002WJZZ		LCD Panel	BN
10-16	PSHEPA098WJZZ		Lightproof Sheet A	AE
10-17	PSHEPA215WJZZ		Creak-preventive Sheet	AA
11	DUNTKC364QA50		MAIN PWB Unit (Z300S-S/S-S(AS))	—
11	DUNTKC364QA51		MAIN PWB Unit (Z300S-S(RS))	—
11	DUNTKC364QA52		MAIN PWB Unit (Z300E-S/E-S(WS))	—
11	DUNTKC364QA53		MAIN PWB Unit(Z300H-S)	—
11	DUNTKC364QA55		MAIN PWB Unit(Z100S-S)	—
11	DUNTKC364QA56		MAIN PWB Unit (Z100S-S(RS))	—
11	DUNTKC364QA57		MAIN PWB Unit (Z100E-S/E-S(XS))	—
11	DUNTKC364QA58		MAIN PWB Unit(Z100H-S)	—
11-2	LHLDZA094WJFW		R/C Element Holder	AF
11-3	RRMCUA012WJZZ		R/C	AF
12	DUNTKC368QA50		SUB PWB Unit (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	—
12	DUNTKC368QA51		SUB PWB Unit (Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))	—
13	DUNTKC370PM00		Operation PWB Unit (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	—
13	DUNTKC370PM01		OPERATION PWB Unit (Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))	—
14	DUNTKC371PM01		LITHIUM PWB Unit	—
18	LANGKA130WJFW		Tilt Angle	AF
19	LANGKA131WJFW		Heat Release Angle	AE
20	LHLDZA172WJSA		Operation PWB Fixing Holder	AD
21	MLEVPA005WJSA		LCD Lock Lever	AC
22	MSPRCA026WJFJ		LCD Lock Spring	AA
24	QEARPA061WJFW		Operation Unit Earth Plate	AC
26	QPWBHB742WJZZ		Lithium PWB FPC	AE
28	GFTABA004WJSA		Lithium Lid	AE
29	TLABMA854WJZZ		Model Label(Z300S-S)	AC
29	TLABMA855WJZZ		Model Label(Z300H-S)	
29	TLABMA856WJZZ		Model Label(Z300E-S)	
29	TLABMA858WJZZ		Model Label(Z100S-S)	
29	TLABMA859WJZZ		Model Label(Z100H-S)	
29	TLABMA860WJZZ		Model Label(Z100E-S)	
29	TLABMA920WJZZ		Model Label(Z300S-S(RS))	
29	TLABMA921WJZZ		Model Label(Z300S-S(AS))	
29	TLABMA922WJZZ		Model Label(Z300E-S(WS))	
29	TLABMA924WJZZ		Model Label(Z100S-S(RS))	
29	TLABMA925WJZZ		Model Label(Z100E-S(XS))	
30-1	HiNDPA697WJSA		Lens Inscrtption Plate	AC
30-2	GCOVAA358WJSH		Lens Hood Outside B	AE
30-3	GCOVAA382WJSA		Lens Hood Inside	AE
31	QPWBHB744WJZZ		Hole Sensor PWB	AB

Ref. No.	Part No.	★	Description	Code
32	VHiEW6671++-1Y		Hole Sensor	AE
33	TLABZA490WJZZ		Feature Label (Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))	
33	TLABZA552WJZZ		Feature Label (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AD
34	QPWBHB772WJZZ		Operation PWB - Sub PWB	AE
a	XiPSN17P02000		Screw M1.7 x 2	AA
b	XiPSN17P03000		Screw M1.7 x 3	AA
c	XiPSN17P04000		Screw M1.7 x 4	AA
n	LX-HZ0050TAFF		Screw M1.7-4 TAP	AA
o	LX-HZA009WJFD		Screw	AA
p	LX-HZ0063TAFN		Screw M1.7-6 TAP GIN	AA
q	XiPSN17P06000		Screw M1.7-6	AA
r	XiPSN20P08000		Screw M2.0 x 8	AA
s	XiPSF14P06000		Screw M1.4 x 6	AA
x	LX-HZ0050TAFN		Screw M1.7-4 TAP	AA

CABINET MECHANISM PARTS LIST

Ref. No.	Part No.	★	Description	Code
101	CANGKA210WJ01		KS Camera Tilt	BB
101-1	LANGKA141WJZZ		Tilt Base Fitting	AL
101-2	LANGKA210WJFW		Tilt Ring Fitting	AH
101-3	LANGKA211WJFW		Tilt FPC Fitting	AE
101-4	LANGKA212WJFW		Tilt Holding Ring	AR
101-5	LHLDZA165WJZZ		Tilt FPC Fixing Holder	AD
101-6	PSHEPA079WJZZ		Tilt FPC Sheet A	AB
101-7	PSHEPA080WJZZ		Tilt FPC Sheet B	AB
101-8	PSPAZA368WJZZ		Norglide Ring	AK
101-9	PSPAZA369WJZZ		Tilt Ring Epacer	AH
101-10	QCNW-B171WJZZ		Tilt Wire	AF
101-11	QEARPA088WJFN		Tilt Earth Ring	AD
101-12	QPWBHB737WJZZ		Tilt FPC	AN
101-13	PSPAZ0126TAZZ		Washer	AB
103	CCOVAA650WJK7		KS Lid Upper Cover (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AN
103	CCOVAA650WJKB		KS Lid Upper Cover (Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))	AM
103-2	JBTN-A130WJSB		Snap Button	AE
103-3	JKNBPA020WJSA		Zoom Knob (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AE
103-3	JKNBPA020WJSB		Zoom Knob (Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))	AC
103-4	LHLDZA291WJZZ		Zoom Knob Holder	AC
103-6	MSPRCA041WJFJ		Zoom Knob Spring	AB
103-7	PSPAZA370WJZZ		Zoom Spacer	AD
104	GCOVAA606WJKH		Tilit Cover	AG
105	CCOVAA384WJK4		KS VCR Operation Cover (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AM
105	CCOVAA384WJK5		KS VCR Operation Cover (Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))	AL
105-2	GCOVAA344WJZZ		LED Cover	AC
105-3	GCOVAA345WJSA		Power Knob Cover (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AE
105-3	GCOVAA388WJSA		Power Knob Cover (Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))	AD
105-4	JBTN-A132WJSB		Power Lock Button	AC
105-5	JBTN-A133WJSB		S/S Button (Z300S-S/S-S(AS)/S-S(RS)/H-S/E-S/E-S(WS))	AF
105-5	JBTN-A151WJSB		S/S Button (Z100S-S/S-S(RS)/H-S/E-S/E-S(XS))	AF
105-6	JBTN-A134WJSC		Standby Button	AD
105-7	JKNBPA015WJSC		Power Knob	AD
105-8	MSPRCA023WJFJ		Spring	AA
106	GCOVAA607WJKH		VCR Front Cover	AG
108	DUNTKC372PM00		Mecha Reversion Detection PWB Unit	—
109	DUNTKC369QA00		Head Amp PWB Unit	—
110	DUNTKC373PM02		VCR Operation PWB Unit	—
111	DUNTKC374PM00		Zoom SW PWB Unit	—
112	GCOVAA337WJSB		Lock Guide Cover	AD
113	GCOVAA608WJKH		VCR Bottom Cover	AF
114	GCOVAA609WJKH		Strap Cover	AE
115	GFTACA021WJKH		Cassette Lid	AK
116	JKNBPA021WJSA		Lid Opening Knob	AC
118	LANGKA138WJ02		Chassis Frame	AX
120	LHLDZA164WJZZ		Selector Knob Holder	AC
121	LHLDZA178WJZZ		Lid lock Holder	AD
122	MSPRTA007WJFJ		VCR Lid Lock Spring	AB
125	QCNW-B167WJZZ		Operation PWB FFC	AC
126	QEARPA065WJFW		Zoom SW PWB Earth Plate	AC
127	QEARPA066WJFW		Power Knob Earth Plate	AC
128	QPWBHB746WJZZ		Zoom PWB FPC	AE
129	VSP0020P-B3WN		Speaker	AL
132	LHLDE1004TASA		Fixture	AC
133	UBNDTA011WJSA		Hand Strap	AH
a	XiPSN17P02000		Screw M1.7 x 2	AA
b	XiPSN17P03000		Screw M1.7 x 3	AA
d	XiPSF17P02000		Screw M1.7 x 2	AA
f1	XiPSF17P04000		Screw M1.7 x 4	AA
g	LX-BZA024WJFD		Tilt Screw	AC
h	LX-BZ0220TAFC		Screw M1.7 x 2	AB
k	LX-BZA023WJFD		Floating Screw B	AB
u	LX-BZ0221TAFC		Screw M1.7 x 3	AB
w	LX-BZA022WJFN		Floating Screw A	AB
x	LX-HZ0050TAFN		Screw M1.7 x 4 TAP	AA
y	LX-HZ0081TAFN		Screw M1.7 x 5	AA

LENS UNIT PARTS LIST

Ref. No.	Part No.	★	Description	Code
502	DUNTKC366QA50		CCD PWB Unit	—
503	CLNS-A005LM58		CCD Service	BN
504	PCOVMA009WJ00		Dustproof Rubber	AC
505	PFiLWA071WJZZ		Crystal LFO	AN
506	PLNSAA005WJN2		Lens	BT
507	PSHEGA023WJZZ		Radiating Sheet A	AD
508	PSHEGA027WJZZ		Radiating Sheet C	AE
509	PSLDMA141WJFW		CCD Shield Case	AC
510	QPWBHB738WJZZ		CCD—Main FPC	AD
511	XiPSN17P02000		Screw M1.7 x 2	AA
512	LX-HZ0073TAFD		Screw M1.7 x 5	AA
514	LHLDZA336WJZZ		LPF Holder	AB

Ref. No.	Part No.	★	Description	Code

SUPPLIED ACCESSORIES

	GCOVHA002WJZZ	Lens Cap	AH
	UBATiA014WJZZ	Battery Pack	BH
	UBATLA001WJZZ	Lithium Battery(CR1216)	AE
⚠	UADP-A053WJZZ	AC Adapter	AY
⚠	QACCBA025WJPZ	AC Cord (Z100H-S/Z300S-S(AS)/H-S/E-S(WS))	AS
⚠	QACCKA004WJPZ	AC Cord (Z100S-S/S-S(RS)/E-S/Z300S-S/S-S(AS)/S-S(RS)/E-S)	AM
⚠	QACCLA022WJPZ	AC Cord(Z100E-S(XS))	AN
	QCNW-B932WJPZ	AVS Cable	AS
	QPLGA0001AJZZ	Conversion Plug (Z100E-S/Z300E-S)	AG
	TCAUSA014WJZZ	Caution Card (Z300S-S(AS))	AB
	TCAUHA078WJN1	Caution Sentence	AH
	TiNSE0383TAN1	Service Card (Z100H-S/Z300H-S)	AC
	TiNSEA081WJN1	Quick User Guide (Z100H-S/Z300H-S)	AC

NOTE: Operation Manual Language

AR: Arabic **C: Chinese** **D: Dutch**
E: English **F: French** **G: German**
I: Italian **P: Portuguese** **R: Russian**
SP: Spanish **SW: Swedish**

TiNS-B144WJN1	Operation Manual(R/E) (Z100S-S(RS)/Z300S-S(RS))	AK
TiNSEA077WJN1	Operation Manual(E) (Z100H-S/Z300H-S)	AH
TiNSLA106WJN1	Operation Manual(E) (Z100S-S/Z300S-S/S-S(AS))	AH
TiNSLA107WJN1	Operation Manual(F/D) (Z100S-S/Z300S-S)	AL
TiNSLA108WJN1	Operation Manual(G) (Z100S-S/Z300S-S)	AH
TiNSLA109WJN1	Operation Manual(I/SW) (Z100S-S/Z300S-S)	AL
TiNSLA110WJN1	Operation Manual(SP/P) (Z100S-S/Z300S-S/S-S(AS))	AL
TiNSLA114WJN1	Operation Manual(E/C) (Z100E-S/E-S(XS)/Z300E-S)	
TiNSLA118WJN1	Operation Manual(E/C) (Z300E-S(WS))	AQ
TiNSLA122WJN1	Operation ManualF/D) (Z300S-S(AS))	AR

ACCESSORIES
(NOT REPLACEMENT ITEM)

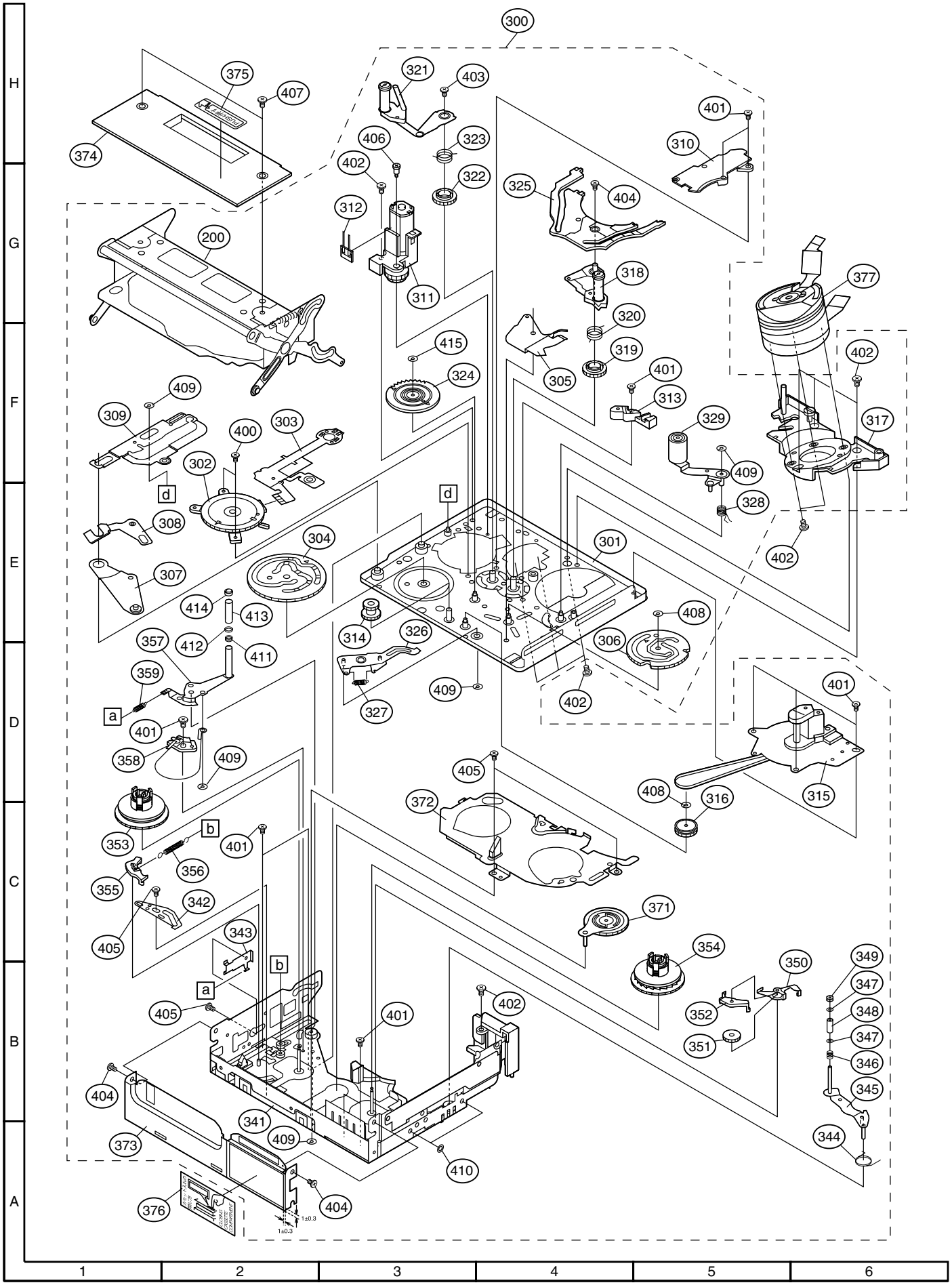
TGANEA004WJN1	Ragistration (Z100H-S/Z300H-S)	—
TGANEA005WJN1	Guarantee Card (Z100E-S(XS))	—
TGANLA003WJN1	Guarantee Card (Z100S-S/H-S/Z300S-S/S-S(AS)/H-S)	—
TLABV0182AJZZ	Bar Code Label	—
TLABZ0525TAZZ	Hong Kong Label (Z300E-S(WS))	—
TLABZ0542TAZZ	The place of origin Label (Z100E-S(XS))	—

Ref. No.	Part No.	★	Description	Code

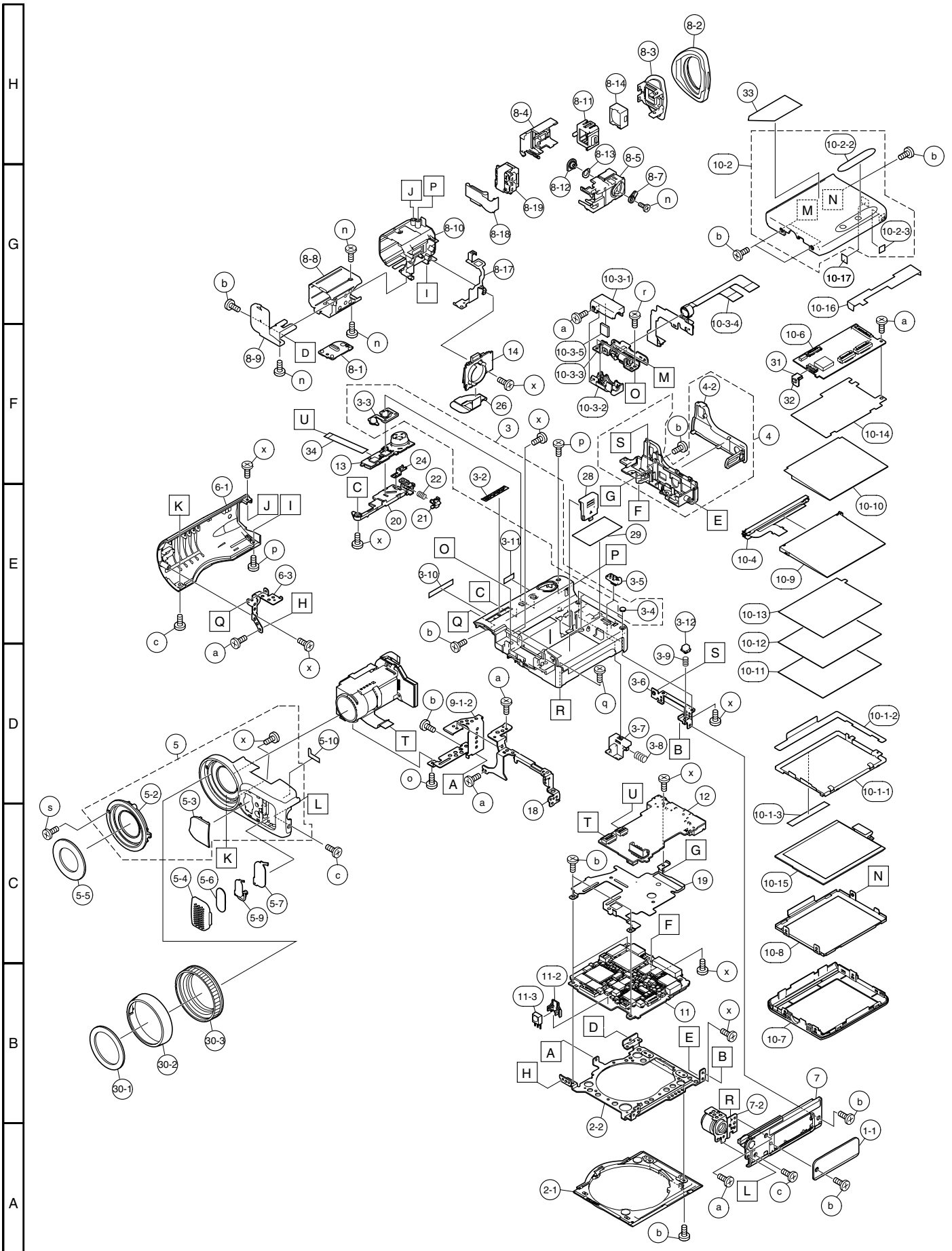
PACKING PARTS
(NOT REPLACEMENT ITEM)

SPAKAA097WJZZ	Packing Add.(Bottom)	—
SPAKCB200WJZZ	Packing Case (Z300S-S/S-S(AS)/S-S(RS))	—
SPAKCB201WJZZ	Packing Case (Z300E-S/E-S(WS))	—
SPAKCB203WJZZ	Packing Case (Z100S-S/S-S(RS))	—
SPAKCB204WJZZ	Packing Case(Z100H-S)	—
SPAKCB205WJZZ	Packing Case (Z100E-S/E-S(XS))	—
SPAKCB207WJZZ	Packing Case(Z300H-S)	—
SPAKCB051WJZZ	Accessory Packing Case	—
SPAKFA196WJZZ	Operation Manual Pad (Z100H-S/Z300H-S)	—
SPAKFA197WJZZ	Operation Manual Pad (Z100E-S/E-S(XS)/Z300E-S/E-S(WS))	—
SPAKFA451WJZZ	Operation Manual Pad (Z100S-S(RS)/Z300S-S(RS))	—
SPAKFA456WJZZ	Operation Manual Pad (Z100S-S/Z300S-S)	—
SPAKFA458WJZZ	Operation Manual Pad (Z300S-S(AS))	—
SPAKPA088WJZZ	Wrapping Paper	—
SSAKA0087TAZZ	Polyethylene Bag (Z100S-S(RS)/E-S/E-S(XS)/Z300S-S(RS)/E-S/E-S(WS))	AD
SSAKA0100TAZZ	Polyethylene Bag (Z100H-S/Z300H-S)	AB
SSAKA0109TAZZ	Polyethylene Bag (Z100S-S/Z300S-S/S-S(AS))	AC
SPAKPA242WJZZ	Side Pad	—

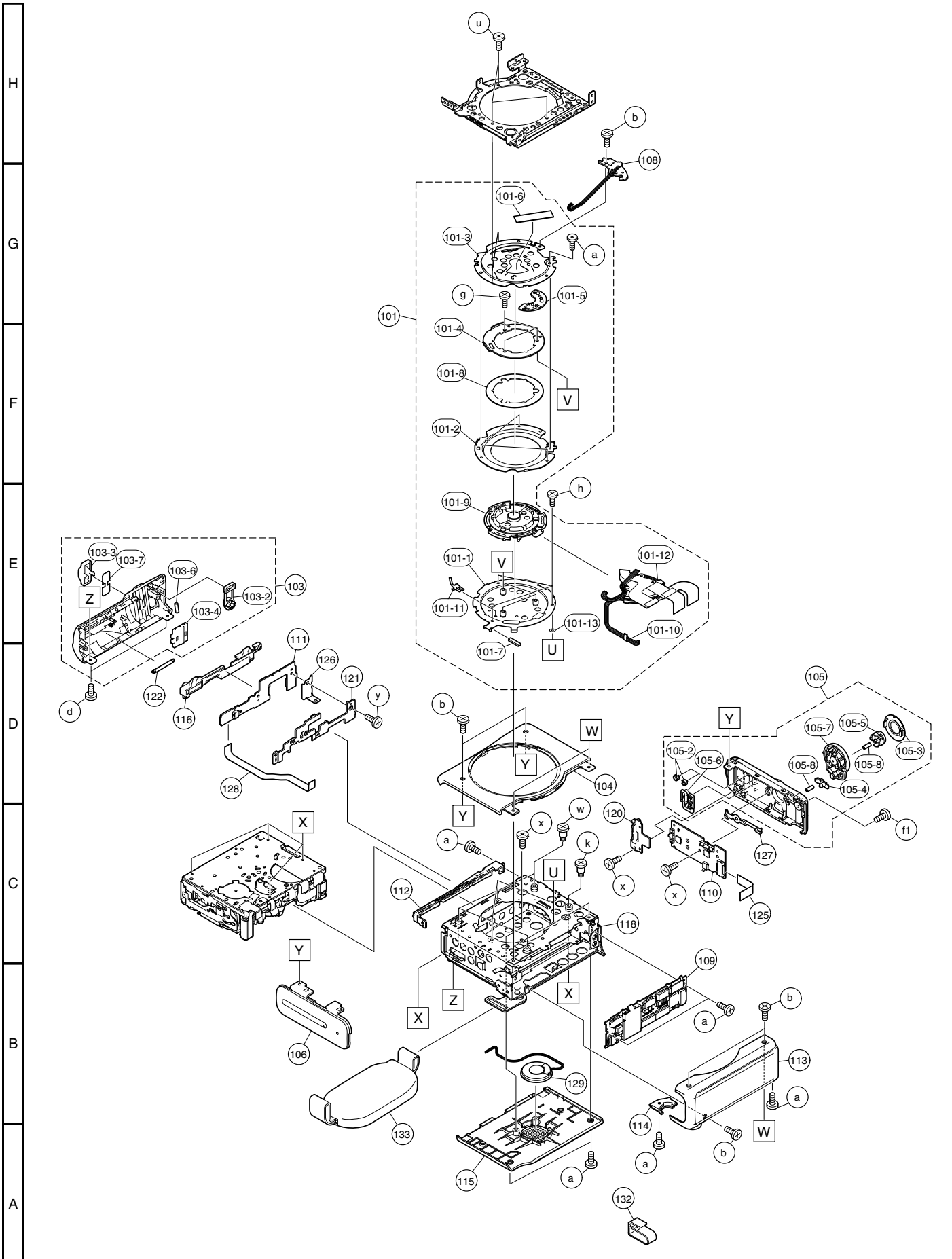
MECHANISM CHASSIS EXPLODED VIEW



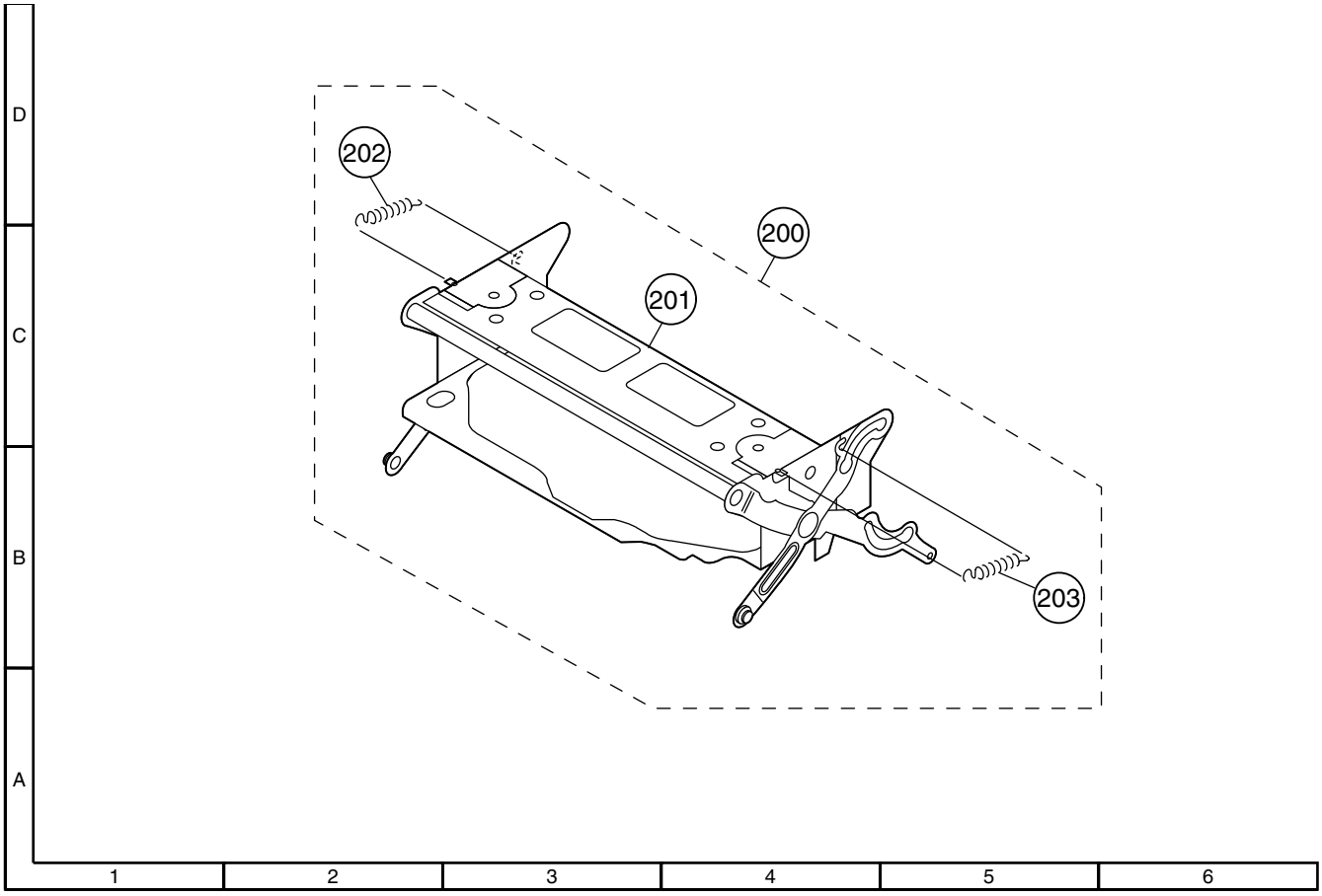
CABINET EXPLODED VIEW



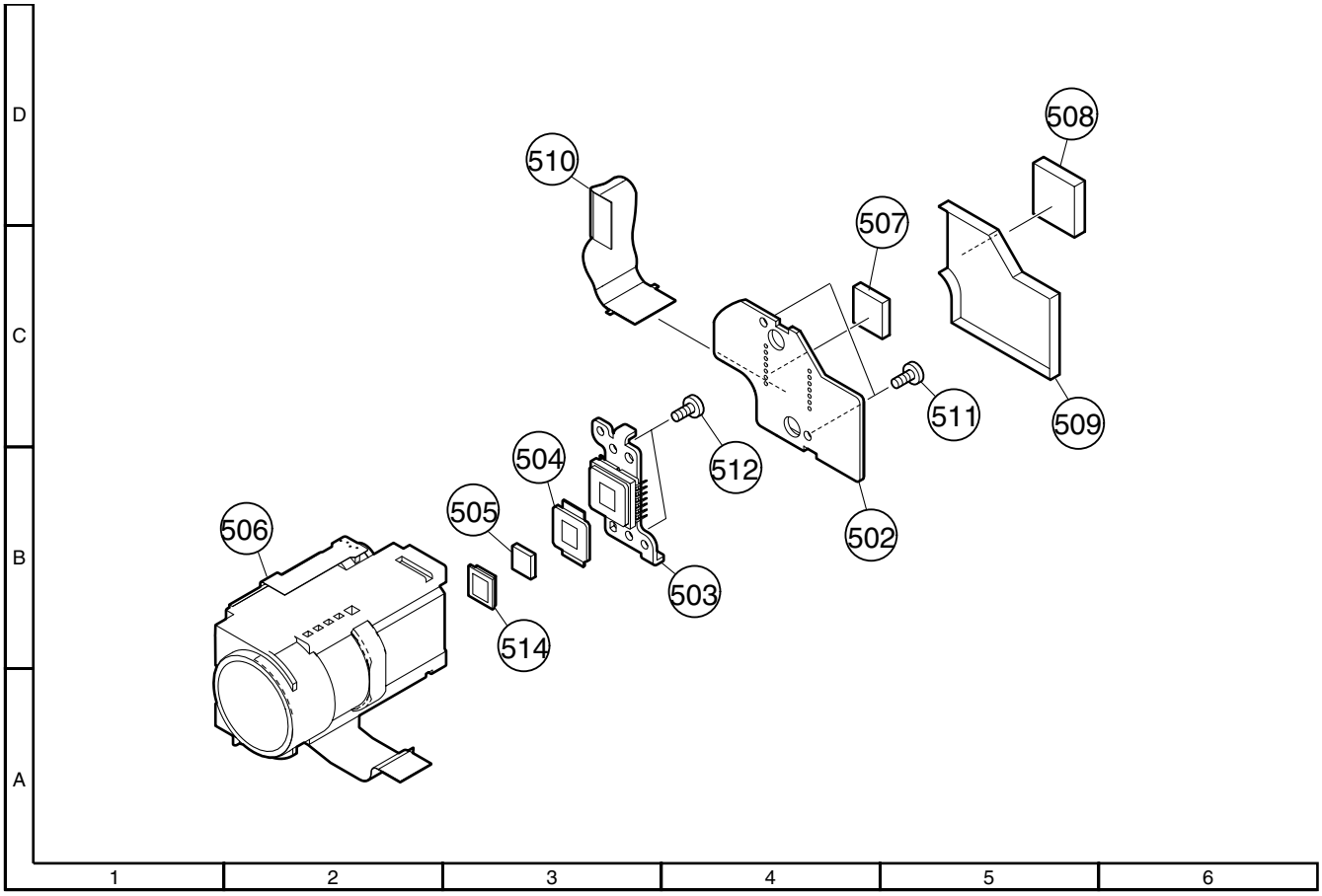
CABINET MECHANISM EXPLODED VIEW



CASSETTE CONTROL EXPLOOD VIEW



LENS UNIT EXPLOOD VIEW



VL-Z100S-S/H-S/E-S/Z300S-S/H-S/E-S SERVICE JIG SPECIFICATIONS

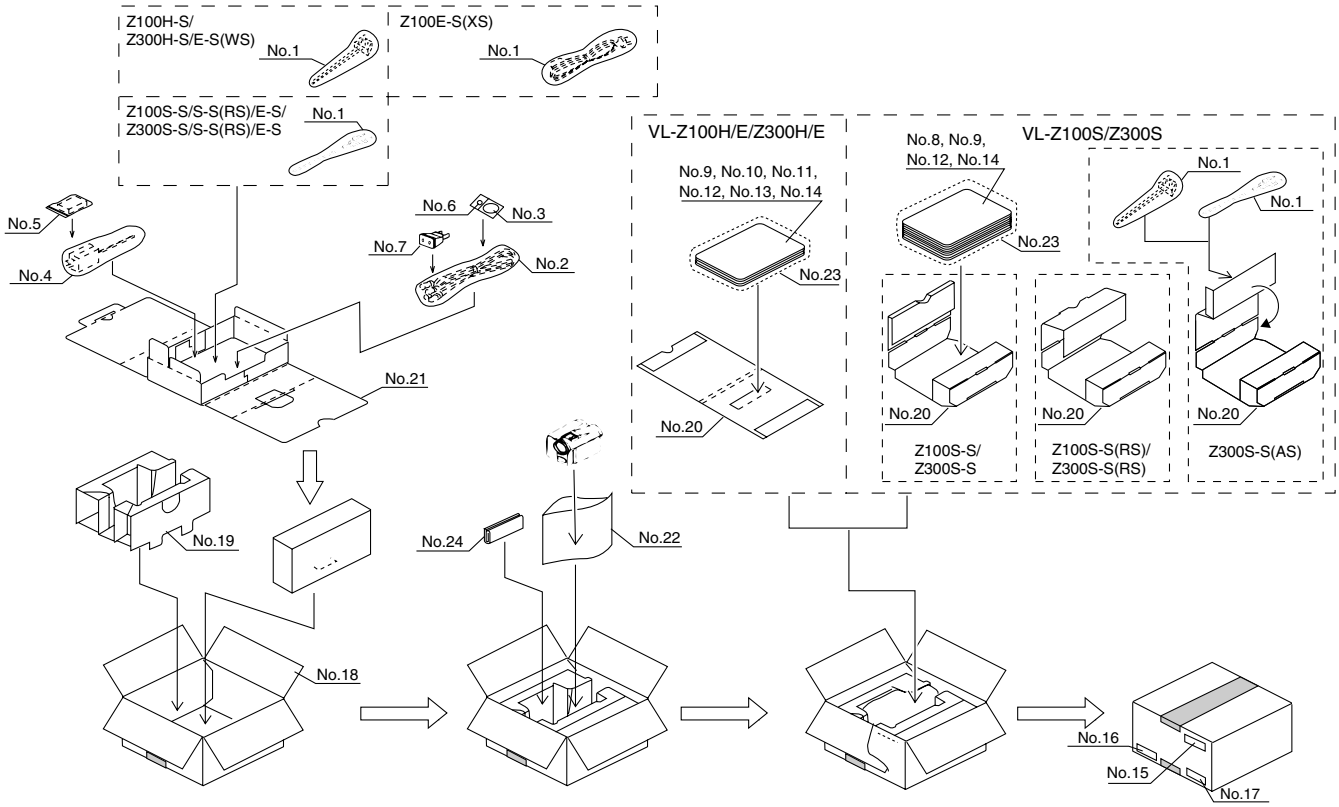
1-1. Adjusting jigs for checking the mechanism

No.	Name	New part	Type number, Application	Part code	Code
1	Cassette torque meter for PB		1mN·m/1.5mN·m	9DASD-1015	DB
2	Torque gauge		For measurement of VS-REW winding torque.	JiGTG0045	CN
3	Torque gauge head		For torque gauge shown left.	9EQTGH-DH5000	BW
4	Tension gauge 4N		For measurement of pinch roller press force.	JiGSG0400	BK
5	Dial tension gauge		PTG-10	9DAPTG-10-10W	CA
6	Torque driver 150mN·m		No. 0 cross bit, No. 00 cross bit	JiGTD1500RTDH	CB
7	Master plane		For checking of height of reel table0.	9EQMP-VLPD1	CL
8	Height adjustment jig		For height adjustment.	9DAHG-PD1	BZ
9	Driver for height adjustment		For adjustment of guide roller. Bit shape.	9EQDRiVER-DH5	BC
10	Alignment tape - (I)		Adjustment of running system(Linear signal)	VR3-GAZXS	CF
11	Alignment tape - (II)		For adjustment of SW point(Color bar signal)	VR3-JPZQS	CG
12	Bit for hexagon nut with opposite side distance of 3 mm		For installation of Tu guide nut.	95CM22001	BL
13	Reel hub for back tension measurement		Refer to Service Manual.	Prepared in the service station.	–
14	String for measuring the pinch roller pressure		Refer to Service Manual.	Prepared in the service station.	–

1-2. Parts for periodical inspection and maintenance

No.	Name	New part	Type number, Application	Part code	Code
1	Oil		Cosmo Hydro HV22	9EQ-OiL-HV22	AE
2	Cleaning paper		Dusper ∑ (SIGMA) ozu Co., LTD	JiGDUSPER	AP
3	Grease: Moly Coat YM-103		Dow corning	99FGREASE-YM103	AH
4	Dry greace CFD-409Z		Sankei Chemical	————————	–
5	Loctite adhesive (1401B)		Three Bond	————————	–

17. PACKING OF THE SET



ACCESSORIES

No.	Model	Parts Code	Description	Remarks
1	Z100H-S/Z300S-S(AS)/ H-S/E-S(WS)	QACCBA025WJPZ	AC Cord	⚠
	Z100S-S/S-S(RS)/E-S/ Z300S-S/S-S(AS)/ S-S(RS)/E-S	QACCKA004WJPZ	AC Cord	⚠
	Z100E-S(XS)	QACCLA022WJPZ	AC Cord	⚠
2	– Common parts –	QCNW-B932WJPZ	AVS Cable	
3	– Common parts –	GCOVHA002WJZZ	Lens Cap	
4	– Common parts –	UADP-A053WJZZ	AC Adapter	⚠
5	– Common parts –	UBATiA014WJZZ	Battery Pack	
6	– Common parts –	UBATLA001WJZZ	Lithium Battery (CR1216)	
7	Z100E-S/Z300E-S	QPLGA0001AJZZ	Conversion Plug	
8	Z300S-S(AS)	TCAUSA014WJZZ	Caution Card	
9	– Common parts –	TCAUHA078WJN1	Caution Sentence	
10	Z100H-S/Z300H-S	TiNSE0383TAN1	Service Card	
11	Z100H-S/Z300H-S	TiNSEA081WJN1	Quick User Guide	
12	Z100S-S(RS)/Z300S-S(RS)	TiNS-B144WJN1	Operation Manual(R/E)	
	Z100H-S/Z300H-S	TiNSEA077WJN1	Operation Manual(E)	
	Z100S-S/Z300S-S/S-S(AS)	TiNSLA106WJN1	Operation Manual(E)	
	Z100S-S/Z300S-S	TiNSLA107WJN1	Operation Manual(F/D)	
	Z100S-S/Z300S-S	TiNSLA108WJN1	Operation Manual(G)	
	Z100S-S/Z300S-S	TiNSLA109WJN1	Operation Manual(I/SW)	
	Z100S-S/Z300S-S/S-S(AS)	TiNSLA110WJN1	Operation Manual(SP/P)	
	Z100E-S/E-S(XS)/Z300E-S	TiNSLA114WJN1	Operation Manual(E/C)	
	Z300E-S(WS)	TiNSLA118WJN1	Operation Manual(E/C)	
	Z300S-S(AS)	TiNSLA122WJN1	Operation Manual(F/D)	

ACCESSORIES *(NOT REPLACEMENT ITEM)*

No.	Model	Parts Code	Description	Remarks
13	Z100H-S/Z300H-S	TGANEA004WJN1	Ragistration	★
14	Z100E-S(XS)	TGANEA005WJN1	Guarantee Card	★
	Z100S-S/H-S/Z300S-S/ S-S(AS)/H-S	TGANLA003WJN1	Guarantee Card	★
15	– Common parts –	TLABV0182AJZZ	Bar Code Label	★
16	Z300E-S(WS)	TLABZ0525TAZZ	Hong Kong Label	★
17	Z100E-S(XS)	TLABZ0542TAZZ	The place of origin Label	★

PACKING PARTS *(NOT REPLACEMENT ITEM)*

No.	Model	Parts Code	Description	Remarks
18	Z300S-S/S-S(AS)/S-S(RS)	SPAKCB200WJZZ	Packing Case	★
	Z300E-S/E-S(WS)	SPAKCB201WJZZ	Packing Case	★
	Z100S-S/S-S(RS)	SPAKCB203WJZZ	Packing Case	★
	Z100H-S	SPAKCB204WJZZ	Packing Case	★
	Z100E-S/E-S(XS)	SPAKCB205WJZZ	Packing Case	★
	Z300H-S	SPAKCB207WJZZ	Packing Case	★
19	– Common parts –	SPAKAA097WJZZ	Packing Add.(Bottom)	★
20	Z100H-S/Z300H-S	SPAKFA196WJZZ	Operation Manual Pad	★
	Z100E-S/E-S(XS)/ Z300E-S/E-S(WS)	SPAKFA197WJZZ	Operation Manual Pad	★
	Z100S-S(RS)/Z300S-S(RS)	SPAKFA451WJZZ	Operation Manual Pad	★
	Z100S-S/Z300S-S	SPAKFA456WJZZ	Operation Manual Pad	★
	Z300S-S(AS)	SPAKFA458WJZZ	Operation Manual Pad	★
21	– Common parts –	SPAKCB051WJZZ	Accessory Packing Case	★
22	– Common parts –	SPAKPA088WJZZ	Wrapping Paper	★
23	Z100S-S(RS)/E-S/E-S(XS)/ Z300S-S(RS)/E-S/E-S(WS)	SSAKA0087TAZZ	Polyethylene Bag	★
	Z100H-S/Z300H-S	SSAKA0100TAZZ	Polyethylene Bag	★
	Z100S-S/Z300S-S/S-S(AS)	SSAKA0109TAZZ	Polyethylene Bag	★
24	– Common parts –	SPAKPA242WJZZ	Side Pad	★

MARK ★ Not Replacement Item

SHARP

COPYRIGHT © 2004 BY SHARP CORPORATION

ALL RIGHTS RESERVED.

No part of this publication may be reproduced,
stored in a retrieval system, or transmitted in
any form or by any means, electronic, mechanical,
photocopying, recording, or otherwise, without
prior written permission of the publisher.

TQ1762-S
Jun. 2004 Printed in Japan

Design and Production Information
Design : Japan
Production : SMM

SA. DS

SHARP CORPORATION
AV Systems Group
Quality & Reliability Control Center
Yaita, Tochigi 329-2193, Japan